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THE UNIVERSITY OF ALBERTA

SOME FEATURES OF LANGUAGE USED BY ADOLESCENTS

by

© GEORGINA M. BONE

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

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THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

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ABSTRACT

This study investigated the informal language used by Grade VIII students and Grade XI students in small groups. Students viewed a film chosen to stimulate discussion and then formed single-sex triads to discuss the film. Each group tape-recorded its discussion. A teacher visited each group for fifteen minutes.

Transcripts of the recorded talk were made from the tapes of four Grade VIII boys' groups, four Grade VIII girls' groups, four Grade XI boys' groups and four Grade XI girls' groups. The transcripts include four minutes of conversation of the students alone and four minutes of conversation with a teacher present.

The analysis of transcripts focused on four types of features: syntactic structures; vocabulary breadth; the use of functions; progression of the discourse. In the syntactic analysis, the numbers of each type of syntactic unit were counted and the average length of the T-units was calculated. The type-token measure was used to obtain information about the breadth of vocabulary. A set of function categories was developed and each T-unit assigned to a category. The analysis of discourse described patterns of participation and evidences of language used for learning.

The results showed that T-unit length in these transcripts did not vary significantly from Grade VIII to Grade XI in the students-alone context. T-unit length varied significantly from the students-alone context to the students-with-teacher context. T-units were longer when a teacher was present. There were indications that differences in T-unit length between contexts could be mainly attributed to the Grade XI groups.

The type-token ratio was not significantly different either from grade to grade or from the students-alone context to students-with-teacher context.

In these transcripts the Grade VIII students used more T-units for talking about the immediate situation than did Grade XI. Each grade used a similar number of T-units to express generalizations or abstractions. Grade XI students used three times as many concrete references to support generalizations as did Grade VIII students. Grade VIII students used more T-units for inventive purposes and word-play than Grade XI students.

The investigation of the progression of the discourse showed that both Grade VIII and Grade XI students talked most frequently about people and social problems. Grade VIII made joking references to their personal characteristics, beliefs and aspirations. The Grade XI groups frequently discussed these topics seriously. In the students-alone context most students took part in the conversation. In the with-teacher context the discussion of most groups was directed by the teacher. The talk of the students provides many examples of language used to share information, to clarify concepts, to expand word meanings, to generalize and to speculate on what could happen in the world.

The differences between Grade VIII and Grade XI as indicated by the analyses of the talk in these transcripts suggests that there are some differences in language use between early adolescence and late adolescence. This study also suggests that the presence of a teacher affects some features of language production at each grade level.

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Chapter I

INTRODUCTION

Theoretical Background to the Study

What the learner brings to a learning situation has a substantial effect on the success or failure of any educational program. The learner's feelings, beliefs, expectations and social sensitivities as well as his intellectual background will profoundly influence what happens when curriculum plans become classroom realities. In addition, every pupil's language competencies and habits will affect what he or she gains from an educational activity.

In the past, some curriculum planners failed to consider adequately what the learners contributed. It was not unusual for specialists to design programs based mainly on the "logic" of the subject matter with which they were concerned. They made many assumptions regarding the motivations and capabilities of the children for whom they were planning. In the words of Jerome Bruner, "Failure to question these assumptions has, of course, caused much grief to all of us" (1971:19).

Although curriculum theorists vary in the emphasis they place on assessing the nature of the learner, few would deny that consideration of the persons instructed has a primary place in educational planning. Many are following the trend suggested by Maxine Greene (1971), who has proposed an approach to curriculum planning through the student's perceived interests and needs. Greene contends that curriculum planners should avoid the "authoritative confrontation of student with the

knowledge structures" (1971:262). She expresses the view that curriculum goals can be achieved only when the learner participates in generating structures of knowledge and brings to the process his own experiences and concerns. "If the curriculum . . . is seen as external to the search for meaning, it becomes an alien and an alienating edifice" (Greene, 1971:262).

When the process of curriculum planning includes serious attention to the participation of the learner, the place of language must be given additional attention. It is no longer acceptable to consider only the language of the teacher and the textbooks. The language habits, abilities and potential of the student must be assessed. What range of vocabulary does he understand and use? How mature are the sentence structures he comprehends and composes? How does he use language to process and assimilate new knowledge?

In England, the government responded to public concern about the language of school students by establishing a "Committee of Inquiry." This committee's report, A Language for Life (The Bullock Report, 1975), pointed out that "talking and writing are means to learning" (Department of Education and Science, 1975:50). One of the committee's recommendations was that every school should develop a language policy which involves every member of the school staff. To assist in implementing this recommendation, the National Association for the Teaching of English published a document, Language Across the Curriculum Guidelines for Schools, in which there are suggestions for creating language policies based on the following premise:

> Teachers must pay attention to the language that surrounds them and their pupils in school--the 'language-life' of the school. In other words, paying attention to language means paying attention

> to learning. We cannot, as teachers, usefully look at language only as a set of skills, but must look at the ways children (and adults too) learn through language. (National Association for the Teaching of English, 1976:11)

These observations about language and curriculum make it reasonable to conclude that there are two aspects of the role of language in the life of a school student which should be considered. One is the way in which he develops those language competencies necessary for his effectiveness as a mature adult. The second is the way he uses language in the learning process. These two elements of language development are interrelated and both merit the attention of those who plan educational programs.

The aspect of language relating to the development of adult competencies has dominated the attention of both educators and the public. Many school systems have devised elaborate testing schemes to try to assess the degree to which their pupils have acquired the skills associated with mature written language forms. Perhaps more attention should be given to discovering the stages in language growth rather than comparing students with an idealized mature form. Recognition of the developmental processes by which linguistic ability matures may be as useful in relation to language as it is to physical development. For example, no one who understands physical development is surprised when an adolescent shows a lack of coordination. Perhaps there are similar problems in developing language maturity which may be mistaken for "errors," but which are necessary stages in the maturing process.

The way in which language is used in the learning process is of great interest to educators, even though it has not received much public attention. It is a difficult issue to discuss because it involves fundamental questions regarding the relationship between language and knowledge.

To gain perspective on the significance of language in cognitive growth it is useful to refer to Vygotsky and Piaget, two seminal writers on this topic.

In an article on "Thought and Word," Vygotsky proposed the following:

> The meaning of a word represents such a close amalgam of thought and language that it is hard to tell whether it is a phenomemon of speech or a phenomenon of thought. A word without meaning is an empty sound; meaning, therefore, is a criterion of 'word,' its indispensable component. It would seem, then, that it may be regarded as a phenomenon of speech. But from the point of view of psychology, the meaning of every word is a generalization or a concept. And since generalizations and concepts are undeniably acts of thought, we may regard meaning as a phenomenon of thinking. (1962:120)

This tie between language and thought affects every lesson in every classroom. If language acts upon and influences thought, then a student's ability to discover meaning will depend upon his response to the "language-life" of the classroom.

Piaget proposed that as thought becomes more complex and more abstract, it becomes more dependent on language:

> We have noted that language is not enough to explain thought, because the structures that characterize thought have their roots in action and in sensorimotor mechanisms that are deeper than linguistics. It is also evident that the more the structures of thought are refined, the more language is necessary for the achievement of this elaboration. Language is thus a necessary but not a sufficient condition for the construction of logical operations . . . . Without language the operations would remain personal and would consequently not be regulated by interpersonal exchange and cooperation. It is in this dual sense of symbolic condensation and social regulation that language is indispensable to the elaboration of thought. Thus language and thought are linked in a genetic circle where each necessarily leans on the other in interdependent formation and continuous reciprocal action. (1954:179)

If language and thought are as profoundly intertwined as indicated by Vygotsky and Piaget, the recommendations of the National Association for the Teaching of English are a logical corollary--"Teachers must pay attention to the language that surrounds them and their pupils" (1976:11).

Harold Rosen, of the University of London Institute of Education, was one of the pioneers in the movement to investigate the language environment of schools. With regard to his observations in British schools he suggested:

> Much of the language encountered in school looks at pupils across a chasm. Some fluent children . . . adopt the jargon and parrot whole stretches of lingo. Personal intellectual struggle is made irrelevant and the personal view never asked for. Language and experience are torn asunder. Worse still, many children find impersonal language mere noise. It is alien in its posture, conventions and strategies. (Barnes, Britton and Rosen, 1971:12)

Modern linguistic scholarship has done much to illuminate the reasons for the chasm which may exist between the language of instruction and the language of the learner. First, there is the problem of "register." English is not a single language system, but a large number of co-existing sub-languages (Strevens, 1966). These sub-languages share many common features (Voegelin, 1960), but also have many distinguishing features. According to White (1974) register refers to "particular variations in language determined by Function, Medium (speech/writing) and Formality or Style" (1974:401). In school, the teacher may assume that the formal, impersonal, controlled register of advanced education is appropriate. If the pupils know only the informal, personal, loosely constructed register of their homes and community, the possibility of a chasm is very great.

Related to the concept of register is the second problem--mode of discourse. In organizing the school curriculum, educators must consider the various disciplines of knowledge. Yet each discipline has distinctive modes of discourse, its own ways of both generating and communicating its view of reality.

> Each aim of discourse has its own logic, its own kind of references, its own communication framework, its own patterns of organization and its own stylistic norms. (Kinneavy, 1969:304)

Not only is each discipline different, but the child is expected to receive and reproduce concepts which were built up by many people over a long period of time.

> Increasing extention of the subject over time and space, and increasing distance between speaker and original phenomena which he is abstracting about, makes for a gradual transition between the chronologic of reporting what happened to the analogic of generalizing what happens, all by a process of summaries of summaries of summaries. (Moffett, 1968:44)

The language of summaries may be alien to the "here and now" concrete language style with which the child is most familiar. The challenge to teachers is to find ways of making a bridge between the highly differentiated, impersonal, compact, unfamiliar language of scholarship and the personal, context-related, loosely-structured language with which the pupil feels most comfortable.

Possibilities for creating a bridge between subject-language and pupil-language are suggested by an analysis of the common styles of usage as set out by Martin Joos (1961). He distinguishes five different types of style--intimate, casual, consultative, formal and frozen. Joos defines the "systematic" features of each style. Intimate, the kind used within a family, is characterized by extraction (fragmentation and reduction of sentences) and jargon. Between intimate and frozen styles there is an increase in completeness and complexity of syntactic structure and in the amount of information "woven into the text." Joos contends that our schools have sent children into adulthood with useless burdens of "linguistic guilt," because they were expected

always to use formal or frozen styles. In addition, unrealistic linguistic practices create a predicament--the child begins to believe that everything which happens in school is artificial and contrived.

> Is there a way out? I know of only one . . . . Teachers must simply abandon the theory that usages differ in quality, as between good and bad . . . . Teacher and pupil must come to terms with each other . . . on the basis that usages can be learned without condemning those which they replace. (Joos, 1964:209)

The model of language development described by Britton (1970) clarifies the way in which usages can be learned and competencies can grow. He suggests a continuum which has some features similar to the scale outlined by Joos. According to Britton, the starting point for developing structured and public forms of language is "expressive language." (This is similar to Joos' intimate-casual style.)

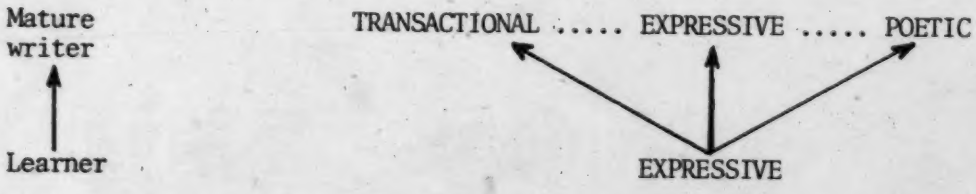
> Expressive speech is language close to the speaker: what engages his attention is freely verbalized and as he presents his view of things, his loaded commentary upon the world, so he presents himself . . . .
>
> Secondly, it is in expressive speech that we are likely to rehearse the growing points of our formulation and analysis of experience. Thus we may suppose that all the important products and projects that have affected human society are likely to have been given their first draft in talk between the originator and someone who was sufficiently "in the picture" to hear and consider utterances not yet ready for a wider hearing. (Britton, 1971:246)

Britton sees expressive language as having possibilities for development in two directions. If the speaker moves into a "participant" situation, where he has a pragmatic reason for communicating, he will be required to use a language style which is more explicit, more concerned with accurate, specific reference, more highly organized and devoid of personal, self-revealing features. Britton calls this "transactional" language.

Expressive language will sometimes develop in a different direction, that is, the speaker could take an onlooker or "spectator" role in relation to his subject and create a poetic communication--"a wrought verbal construct, such as a story or poem" (Britton, Burgess, Martin, McLeod and Rosen, 1975:11).

For a teacher, there are two significant features of the Britton model. The first is a description of the direction of development as language facility grows from elementary stages to adaptable and efficient maturity. "Thus, in developmental terms, the expressive is a kind of matrix from which the differentiated forms of mature writing are developed" (Britton, Burgess, Martin, McLeod and Rosen, 1975:11).

The Schools Council researchers used the following diagram to illustrate this concept of expressive language as a matrix for the development of other forms of language.



(Britton, Burgess, Martin, McLeod and Rosen, 1975:83)

A second feature of Britton's theory which has implications for instructional purposes is the proposition that organized, explicit language formulations have their roots in expressive language. Mature speakers and writers do not use highly structured language at all times.

> It must be admitted that the more we worked on this idea of the expressive function, the more important we felt it to be. Not only is it the mode in which we approach and relate to each other in speech, but it is also the mode in which, generally speaking, we frame the tentative first drafts of new ideas. (Britton, Burgess, Martin, McLeod and Rosen, 1975:82)

The form of language used by teachers and textbooks may be so different from expressive language that it contributes to the alienation of some children from the academic life of the school. It is clear from the analysis of both Joos and Britton that the differences are not confined to a matter of vocabulary or syntax. The differences between intimate and formal, expressive and transactional language involve organizational and contextual features as well as the purposes and social constraints of the situation. Because expressive language is a carrier of personal feelings as well as ideational features which arise out of the familiar experiences of the speaker, identification of this form as the matrix from which more specialized forms develop suggests a way to incorporate into the curriculum the learner's own interests, feelings and values. Use of this form of language could be a way to bring about the type of school program envisaged by Maxine Greene in which the learner generates his own structures and "lends the curriculum his life." If the learner who is beginning a new unit of work starts with activities in which he can handle new ideas with expressive language, he will be able to incorporate his personal experiences, observations and feelings into the learning situation, using a register or style with which he feels comfortable. The teacher will then need to find ways of helping the pupil to move from the expressive to the transactional or poetic language at a rate and a time appropriate for his age and the nature of the subject. That the

expressive mode holds great potential for helping students to bring their own life to the curriculum is being investigated by teachers participating in many of the writing projects which have developed in the United States. Mary Barr, who is associated with the San Diego Area Writing Project, reports:

> Many teachers seem to relish the idea of the "expressive" mode described by James Britton. One teacher wrote: "I am finding that asking students to do expressive writing helps them to clarify their own thinking and to better understand what they know and what they don't know about a subject. I am using it as a tool right now." (Barr, 1979:4)

There is, however, a problem faced by teachers searching for ways to use expressive language as a base from which to start the process of their students' growth toward expertise in handling mature forms of transactional or poetic language. James Moffett, author of A Student-Centred Language Arts Curriculum, expresses the problem as follows:

> The most sensible strategy for determining a proper learning order in English, it seems to me, is to look for the main lines of child development and to assimilate to them, when fitting, the various formulations that scholars make about language and literature . . . . The chief difficulty with this strategy is the lack of information about how the thought and speech of children do in fact grow. (1968:15)

What Moffett has identified as a problem in English is true for other subjects as well. We do not know how thought and language develop. This problem of a "lack of information about how the thought and speech of children do in fact grow" becomes acute when pupils enter adolescence. This is the time when most young people enter a secondary school system which places emphasis on subject specialization. They are likely to have teachers who have chosen to do advanced studies in a particular

field. It is possible that their teachers have unconsciously adopted a specialized vocabulary, organizational techniques and modes of expression which are like a foreign language to the pupils. If a teacher becomes aware of a language problem and, in a search for ways to communicate with his pupils, tries to find information about the characteristic features of adolescent language development, he is likely to be disappointed. Referring to the language of adolescents, James Kavanaugh commented:

> Relatively little research has been done . . . . In particular, there is no complete description of the changes taking place during this period of human development. (1974:261)

If teachers are to devise strategies for learning which relate to stages of pupil development, they need to have information about the characteristics of that development. Because language is so important for communication and for processing information and ideas, the stages of language development are significant. Use of the expressive mode of language holds potential as a way of promoting both cognitive and language growth; it follows then, that information about the characteristics of expressive language used from age to age could help teachers to find ways of creating an effective "language life" in their schools.

Expressive language may be either oral or written. Exploration of either type could be very useful. Nevertheless, there are special reasons why oral, expressive language needs attention. First, it is a primary means of communication. Secondly, oral language provides a base from which written language may be developed.

> The speaking voice precedes the writing pen and the reading eye in the life-history of every normal child. Given the

> opportunity and a favouring environment he can use it to do more things than he can do with the written word. Through improvised talk he can shape his ideas, modify them by listening to others, question, plan, express doubt, difficulty and confusion, experiment with new language and feel free to be tentative and incomplete . . . .
>
> Talk with small groups and individuals gives the teacher greater linguistic scope and makes it possible for him to influence the pupils' language more profoundly. (Barnes, Britton and Rosen, 1971:164)

The Bullock Report challenges schools to take seriously the oral language needs of children and youth.

> A priority objective for all schools is a commitment to the speech needs of their pupils and a serious study of the role of oral language in learning. (Department of Education and Science, 1975:156)

The committee which prepared the Bullock Report sees a need for research in this area. They suggest that teachers have an important role to play in investigating children's language. In the examples of topics which they propose for research, they include studies of "small groups of pupils talking together" (Department of Education and Science, 1975:155).

No single piece of research will provide the answers to all the questions we need to ask about the "language-life" of school children and the developmental stages of language and thought. Because of the increasing interest in informal, expressive language and its place in the learning milieu, a study of the expressive language of adolescents deserves immediate attention. This study of some features of language used by adolescents was designed to provide information about some of the ways adolescents use language in small groups. The results should be of value to teachers who are interested in the language the learner brings with him to the classroom and how it can be used to help him

generate his own structures of knowledge at the same time as he becomes more proficient in the uses of langauge.

The Purpose of the Study

The purpose of this study was to examine some of the characteristics of adolescent talk in small peer-groups and to determine how it differs from talk when a teacher is present. In addition, the study was planned to investigate the differences between the talk of students in Grade VIII and students in Grade XI. Some features which might be affected by a difference in age and some features which could be related to how adolescents use language for learning were selected for examination.

The Problem

To carry out the purposes of the study the following questions were investigated:

1. Does the informal conversation of Grade VIII adolescents talking in peer groups differ from the conversation of Grade XI students talking in peer groups?
2. Does the informal conversation of Grade VIII adolescents talking with a teacher differ from the informal conversation of Grade XI adolescents talking with a teacher?
3. Does the informal conversation of Grade VIII and Grade XI students talking in a peer group differ from their informal conversation when a teacher is with them?

Each of these questions was investigated with reference to the following features of informal conversation:

1. the syntactic structures;
2. the breadth of vocabulary;
3. the functions for which language is used;
4. the progression of the discourse.

Assumptions

To investigate the problem, it was assumed that tape-recordings of students talking in groups of three during a regularly scheduled school period would provide authentic samples of adolescent talk. Single sex groups were chosen on the assumption that conversation would be produced more freely in this type of group.

Another assumption accepted in planning the study was that information about the linguistic and cognitive development of adolescents could be obtained from an analysis of their informal, peer group talk. This assumption implies that casual language may be used for the kinds of processing of ideas which are vital to school programs. In addition, it implies that this informal conversation can reveal much about the linguistic abilities which the speakers have developed and their potential for using language for other purposes such as more formal speaking or writing.

The decision to study the spoken language of Grade VIII and Grade XI students assumes that a comparison of these two grades could indicate some of the differences between students who are in the early years of adolescence and students who are nearing the end of adolescence.

Delimitations

1. The study was restricted to students in Grade VIII and Grade XI. The three-year spread between these grades is large enough that developmental trends are likely to be revealed. Where schools are organized as junior-secondary and senior-secondary schools, Grade VIII is the middle grade of junior-secondary school and Grade XI is the middle grade of senior-secondary school.
2. The classes that participated in the study were of mixed ability and average ability. They were selected to be representative of students for whom school programs are planned.
3. All participants were from schools in Alberta. One-half of the participants attended city schools; one-half of the participants attended a small town school.
4. The type of language studied was restricted to the informal language produced by students talking in triads of peers and the informal language produced when a teacher joined each triad.
5. Each of the 32 transcripts for study was limited to four minutes of talk taken from the mid-point of each tape-recording.
6. Since the recordings of each group were made with one microphone, no attempt was made to identify individual voices for the analysis of syntax, the analysis of breadth of vocabulary, or the analysis of functions. Individual voices were identified for the description of the progression of the discourse.

Limitations

The knowledge that conversations were being recorded may have affected the participation of some students. Most of the tapes contain a very rapid flow of conversation, but there were some pauses and references to the tape-recorder which indicated that the students were conscious of its presence. They were told that their visitor was from the University of Alberta and that other people from the university might listen to the tapes. Although this assured them that what they said would not be assessed by anyone in the school, it may have caused some confusion about whether their audience was the people in their group of the people who would listen to the tapes.

The groups were assembled in a random manner. Students who did not relate well to each other may have been placed in the same group. This could have affected the ways they spoke to each other. In addition, the relationship of the teachers to the students could have affected the students' participation when a teacher was present.

The generalizability of this study has been limited by the following factors:

1. The students may not be representative of other students in these grades.
2. The number of students from each grade was limited to 24.
3. The length of each transcription was limited to four minutes.
4. The conversation may have been affected by the topic, the stimulus, or the nature of the task.

5. The conversation may have been affected by the physical surroundings and the social milieu.

Definition of Terms

Students-alone context. This context existed when three students from the same class and the same sex talked for approximately fifteen minutes with only the three students present.

Students-with-teacher context. This context existed when a teacher joined a group of three students and talked with them for approximately fifteen minutes. To reduce the possibility that the teacher would be perceived as an authority-figure, only teachers from the school who were not teaching the students at the time of the study, participated in the discussion.

Transcript. A transcript is the written presentation of the words spoken during the middle four minutes of the conversation of three students in the students-alone context and an accompanying presentation of the words spoken during four minutes of the conversation of the same students in the students-with-teacher context. The transcripts used normal spelling and punctuation so that the conversation could be read easily. When the speakers used word forms or pronunciations which were different from commonly accepted careful pronunciations, this was indicated by changes in the usual spelling. For example, a slurred pronunciation of "going to" is spelled gonna in the transcripts.

Syntax. For this study, syntax is defined as the organization and relationships of word groups.

Syntactic categories. These are the kinds of groups of words found in informal spoken discourse. They are distinguished partly by form and partly by their function in the discourse. A description of each category is presented in Chapter III.

The Significance of the Study

This study provides information about the informal, unrehearsed language of adolescents. The differences revealed between Grade VIII and Grade XI could help educators assess which program activities involving language are likely to be appropriate for young adolescents and which activities are suitable for older students.

This study provides some indication of the direction of changes which may take place in the language and thinking of students as they move through school from Grade VIII to Grade XI. This could assist those who are planning future studies to identify aspects of growth which would be worthwhile to study in further detail.

The Bullock Report in England (Department of Education and Science, 1975) and several educational administrations in Canada recommend that teachers systematically investigate the language which their pupils use in informal conversation. The methods used in this study to record and analyze students' language could be adapted for this purpose.

Linguistic studies of register (Voegelin, 1960; Joos, 1961; Strevens, 1966) point out differences between informal conversation and written prose. However, oral language is usually the base from which written language is developed. This study describes the informal, oral language of some adolescents. Thus, it provides information about

the nature of the oral resources from which the written language of these adolescents may be developed.

The functions analysis revealed the purposes for which the participating students used language. This provides an indication of their thinking processes as well as their interaction behaviour. The function categories developed for this study could have two uses: first, to help teachers gain from their observations of students' conversations useful information for program planning; second, to provide a set of categories which might be developed and refined for use in future research on the language of adolescents.

The analysis of the progression of the discourse gives a description of students expressing their thoughts and feelings. This description could help educators to make assessments about the extent to which free discussion has potential as a learning process.

Overview of the Study

This report of the study is presented in five chapters. The summaries given below provide an overview of the four chapters which follow Chapter I.

In Chapter II there is a review of the background literature and research reports which relate to the study.

Descriptions of the methods used to obtain, select and transcribe the tape-recordings of adolescents in Grade VIII and Grade XI are contained in Chapter III. This chapter also has explanations of how each type of analysis was developed and descriptions of the procedures used for carrying out the analysis.

The results of the study are reported in Chapter IV. The

results of each type of analysis are given separately in the following order:

1. The Analysis of Syntax;
2. The Analysis of Breadth of Vocabulary;
3. The Analysis of Functions;
4. The Analysis of the Progression of the Discourse.

A summary of the study, the conclusions developed from the study, and recommendations for further research are presented in Chapter V.

Chapter II

A REVIEW OF THE BACKGROUND LITERATURE

The Multi-disciplinary Background

The study of language development and its implications for pedagogy depends on the contributions of a number of disciplines for both content and methodology. The Ford Foundation, which has provided extensive funding for research about language in education, produced a special pamphlet describing and defending the multi-disciplinary backgrounds of the research it supports. Melvin Fox, author of the pamphlet, states:

> Because language pervades all of human life, many special skills are needed to study how it functions. Psychologists, neurologists, political scientists, anthropologists, sociologists, educators and linguists increasingly find themselves forced to collaborate in a variety of explorations to understand the nature of language, how it is acquired, how it is used by the individual and society, and how it can be taught. (1975:7, 8)

In common with other studies of language development in an educational setting, this study is founded on literature and research from several of the disciplines referred to by Melvin Fox.

Linguistics

Linguistics, the scientific study of language, is one of the major sources of relevant background information for this study. Originally, inquiries about language were conducted by disciplines such as philosophy or psychology. The emergence of linguistics as a separate discipline began with the comparative studies of Indo-European languages

in the late nineteenth century. As the methodology for investigating language was developed and the results published by linguists such as Sapir (1929), Bloomfield (1933), and Fries (1952), the prescriptive approach to language which had been popular in schools was challenged. Whereas the traditional view assumed the existence of some absolute standard of correctness from which any deviation was wrong, the linguists turned attention from "right" or "wrong" to discovering the nature of language and how it functions in society. This study follows the model of the linguists as it attempts to discover some information about the nature of language used by adolescents, and how it functions in a peer-group situation.

Another aspect of linguistic study which has very practical applications for education is the investigation of variation in language styles according to the demands of the situation in which it is used. Malinowski (1935) found in his study of language used in the Tobriand Islands that the meaning of the islanders' talk could not be interpreted accurately without an understanding of the circumstances in which the language was spoken. Firth (1935) enlarged on Malinowski's views about the importance of the context of a situation by drawing attention to the ways the English language varies according to the milieu in which it is used. The examination of variation within one language has been the subject of much investigation since the time of Malinowski and Firth. Some linguists, particularly in England, have referred to the various types of one language as register, while others prefer to refer to the differences in language which occur with context as differences in style. As explained by Strevens (1966), English is composed of a large number

of co-existing sub-languages. Voegelin (1960) noted that these variants of English all have many features in common. However, the location, the audience, the nature of the message and the intent of the speaker all affect the choice of language (Jakobson, 1960; Joos, 1961; Quirk, 1972). Gregory (1967) reviewed the progress made in studying language variation and surveyed the needs for more research, especially research which would provide useful information for educators.

The discovery by linguists that English can be analyzed into many distinct types, all of which are used for effective communication, set in motion a movement to change school practices. Many studies of register and style were undertaken to help teachers of English as a second language as well as native speakers. The Linguistic Sciences and Language Teaching (Halliday, McIntosh and Strevens, 1964) presents an extensive discussion of the possibilities for applying the results of linguistic research to classroom practice. In referring to foreign language teaching, the authors suggest, "The question of what variety or varieties to teach arises" (1964:173). They recommend that a foreign language teacher restrict the language taught to a particular dialect and register (1964:207). When the students are native speakers, these linguists propose a type of language teaching for which they use the term "productive." The purpose of this type of teaching is to help a student to "extend the use of his native language in the most effective way" (1964:241). To do this, the authors contend that students should be taught the varieties of language appropriate for different contexts. Crystal and Davey (1969) use the word "style" to refer to different varieties of English, insisting that the investigation of style should

not be limited to "poetry and belles lettres" (1969:v), but should also include the "repertoire of English used in everyday life" (1969:vi). In the publication, Investigating English Style (1969), these linguists describe a process for stylistic analysis and apply this analysis to various samples of language such as a telephone conversation, religious prayers and legal documents.

Since the publication of these early works, numerous books and articles have produced more refined and detailed descriptions of what is involved in identifying variations within a language and have also given more precise characteristics of specific types of language. Articles such asthose of Ure (1969), Crystal (1970) and White (1973) which appeared in journals for teachers of English as a foreign language were of this nature. In Canada, a large project sponsored by the Public Service Commission made extensive investigations of registers used by native speakers of both English and French (Chiu, 1972, 1973, 1975). Strevens (1977) stressed the need for teachers to be thoroughly familiar with registers or varieties of language such as those investigated by Chiu. He concurred with Crystal (1970) who had pointed out that teachers need to be able to teach students how to produce language which is appropriate for the context of each situation. Teachers also need to be able to teach students to understand and respond to the various kinds of English that are used. Lyons (1970) described the orientation of teachers who accept the advice of the linguists as follows:

> The ability to use one's language correctly in a variety of socially determined situations is as much and as central a part of linguistic 'competence' as the ability to produce grammatically well-formed sentences. (Lyons, 1970:287)

The design of this study of language used by adolescents reflects the linguists' point of view that variation according to context is an important part of the study of language. The informal conversation of small peer groups was selected as one context which merited detailed analysis. Since ability to modify language according to the situation is a language competence considered by linguists to be important, this study introduced the teacher-with-students context to provide a comparison with the students-alone context.

Philosophy

Although linguistics as a discipline has become separate from philosophy in many ways, there are frequent contributions to the understanding of language by philosophers which serve to illuminate the purpose of linguistic research and to give it direction. In this study attention is given to the analysis of the ways adolescents use language to express their thoughts and feelings to each other and to teachers. The importance of this is indicated by Phenix (1966). He suggests that language in education must be seen as a creative power because it is the dominant influence in the formation of the conscious inner world of the learner and the meanings generated within a person are the sources of his creative action. Phenix concludes that vitality of learning can only be achieved "by a renewed dedication to language as a life-giving force" (1966:44). Langer (1960) refers to the talk between individuals as an essential part of being human. "From the first dawning recognition that words express something, talk is a dominant interest, an irresistible desire" (1960:43). Martin (1980) shows the need for the opportunity to interact with other persons in order to promote developments in the

life of the mind. "A substantial and extraordinarily important part of the phenomenon which any satisfactory theory of meaning ought to account for is the degree to which my meanings are sharpened, honed, and fueled by the reciprocal communications in which I involve my verbal (or other) symbols and symbol systems" (1980:21). These comments on the place of language in life and in learning imply that the talk of adolescents in peer groups is of importance in the development of the student and thus should be examined.

Psychology

In a study of a specific age-group such as this study of adolescents, it is important to survey what is known about the characteristics of that stage of development so that the experimental tasks may be appropriate and the observations precise. Psychologists have produced abundant literature about adolescents. For this study of conversations in peer-groups, a question posed in the title of an article by Eve (1975: 152) is relevant: "'Adolescent Culture,' Convenient Myth or Reality?" Eve's investigation found some evidence for the existence of an adolescent culture. In his survey of student and teacher opinions about social issues, the adolescents differed significantly from the teachers in some, though not all, of the questions. Brittain (1963) found tendencies for girls in high school to follow the advice of peers rather than parents. The girls chose peer advice over parental advice mainly in short-term decisions and preferred parental advice for long-term choices. Mitchell (1975) summarized the literature on the importance of the peer-group for adolescents as follows:

> Most psychological needs are satisfied by peers during adolescence; most recreational time is spent in the presence of peers; most important events are related to the peer community. These inherent realities of our society are given additional weight by the way we segregate youth into narrow school environments and limited work environments. (1975:145)

If, as these psychologists suggest, the peer-group plays an important role in the life of the adolescent, it is possible that peer influence affects the language used by adolescents.

Examination of the many anthologies of writings about adolescents revealed that little attention is given to language. Youth: The Seventy-fourth Yearbook of the National Society for the Study of Education (Havinghurst and Dreyer, 1975) has no articles on language. Adolescent Development (Gold and Douvan, 1969) also omits articles on language. Grinder's (1969) Studies in Adolescence has an article by Swartz and Merton on status terminology used by high school students. This anthology also has an article by Lerman showing a relationship between teenage argot and criminal activity. In other anthologies such as that of Hill and Shelton (1971) or Cantwell and Svajian (1974) the few articles which refer to language are usually about deviant or handicapped youth.

Although the psychological literature makes few references to specific aspects of the language development of adolescents, some of the literature on cognitive development includes discussions of the relationship between language and thought. Lawton (1978) points out that in the 1960's, language as a factor in educational achievement began to receive considerable attention. Lawton attributes this to the translation into English of writings by the Russian psychologists, Luria and Vygotsky, and describes the essence of their writings as follows:

> Luria, Vygotsky and others of the school held a dynamic view of language--that is they maintained that language was not simply the outward manifestation of inner thinking, but that it shapes, makes possible and even produces some kinds of thought. (1978:43, 44)

In addition, Lawton interprets Luria as showing "that children internalize language in such a way as to become self-regulating systems rather than the passive responders to stimuli suggested by Skinner" (1978:44).

An English edition of a book by Luria and Yudovich, Speech and the Development of Mental Processes in the Child (1971), gives an account of changes in the behaviour of a set of twins which resulted after treatment of a speech deficiency. On the basis of their observations, Luria and Yudovich concluded that there were "cardinal improvements in the structure of the twins' mental life which we could only attribute to the influence of the one changed factor--the acquisition of a language system" (1971:107).

Vygotsky's Thought and Language (1962), was not made available to English readers until 28 years after his death. In Bruner's (1962) introduction to the first edition in English, he suggests that according to Vygotsky, "Concepts and the language that infuses and instruments them give power and strategy to cognitive activity" (1962:ix). Vygotsky described his own book as "oriented toward a central task, the genetic analysis of the relationship between thought and the spoken word" (1962: xx). After a profound discussion of speech development in children and the development of "inner speech," he concluded this book with the following observation:

> Thought and language, which reflect reality in a way different from that of perception, are the key to the nature of human consciousness. Words play a central part not only in the development of thought but in the historical growth of consciousness as a whole. A word is a microcosm of human consciousness. (1962:153)

Piaget, a Swiss contemporary of Vygotsky, drew attention to the development of thought and speech in children with the publication of The Language and Thought of the Child in 1923. Piaget has modified some of the theories he suggested at that time, but as Vygotsky commented in a critical review of Piaget's works, "An avalanche of facts, great and small, opening up new vistas or adding to previous knowledge, tumbles down on child psychology from the pages of Piaget" (1962:10, 11). Vygotsky praised Piaget's clinical method which, according to Vygotsky, gave "coherent, detailed, real-life pictures of child thinking" (1962:11).

A major contribution which Piaget made to the literature about adolescents is his description of cognitive growth. In addition to describing the stages by which young children develop their cognitive abilities, he described the changes which occur in early adolescence. In The Growth of Logical Thinking he stated:

> The adolescent differs from the child above all in that he thinks beyond the present. The adolescent is the individual who commits himself to possibilities . . . . In other words, the adolescent is the individual who begins to build 'systems' or 'theories' in the largest sense of the term. (Inhelder and Piaget, 1958:339)

Piaget relates the new conceptual powers of the adolescent to his life situation. His newly developed abilities to theorize enable him to speculate about his own future. He is able to become aware of the ideologies and philosophies in the world around him. Piaget describes a kind of egocentrism which accompanies this development in adolescent thinking. The young person may fail to distinguish between his own point of view and that of others. Piaget suggests that small peer-group discussions are a way to counteract egocentrism--"It is most often in discussions between friends, when the promoter of a theory has

to test it against the theories of others, that he discovers its fragility" (Inhelder and Piaget, 1958:346).

Another aspect of Piaget's theories of cognitive growth which has implications for the uses of language in an educational setting is his proposition that the development of the intellect is governed by a process to which he gives the name "equilibration." That is, the child from birth is continually creating a mental organization which is in a state of equilibrium. However, individuals are constantly encountering perceptions which affect the cognitive state. To deal with these, the person may assimilate these perceptions into the existing mental structures or may find it necessary to reconstruct his cognitive organization in order to accommodate the new information. Piaget (1975) comments on this as follows:

> There has to be a constant equilibrium established between the parts of the subject's knowledge and the totality of his knowledge at any given moment. There is a constant differentiation of the totality of knowledge into the parts and an integration of the parts back into the whole . . . .
>
> In the case of biological or cognitive equilibrium the links are not passive; they are the very source of action. The totality presents a cohesive force which is specific and which is precisely the source of the assimilation of new elements. (1975:839, 841)

If Piaget's analysis of cognitive growth is accurate, school programs should be making provision for the processes of assimilation and accommodation. The obvious sequel to that proposition is the question, "How can school programs provide for assimilation and accommodation?" In this study of the language used by adolescents talking with peers, the analysis of the progression of the discourse included investigation of how the students used language to share information and to

exchange opinions. Attention was given to student comments which might help other students assimilate the information or change their constructs, if necessary, to accommodate new information.

Kelly (1963) presents a point of view regarding cognition which approaches the question in a completely different way from that of Piaget. Nevertheless, his view suggests similar implications for school programs. Kelly describes humanity as having an interesting relationship with the universe because humans are able to create a representation of the universe in their cognitive structures. He points out that this formulation "emphasizes the creative capacity of the living thing to represent the environment, not merely respond to it" (1963:8). According to Kelly, the inner representation of reality which is accumulated during the course of a person's life acts as a lens through which he perceives the events he experiences. Thus, each person's inner representation affects his response to each new experience. Kelly calls the patterns by which an individual organizes his experiences of the world "constructs." These constructs then become ways of construing the world:

> Man looks at his world through transparent patterns or templates which he creates and then attempts to fit over the realities of which the world is composed. The fit is not always very good . . . .
>
> In general man seeks to improve his constructs by increasing his repertory, by altering them to provide better fits, and by subsuming them with superordinate constructs or systems. (1963:8, 9)

By implication, school programs should provide opportunities for students to improve their constructs. As with Piaget's description of the processes of assimilation and accommodation, this theory suggests a need for cognitive activity, not just absorption of information, and this poses questions for curriculum planning. By investigating the

talk of adolescents as they responded to a film, this study gives consideration to the ways these adolescents used language to present evidence of how they construe the world. In the analysis of the progression of the discourse, consideration is given to evidence which might suggest that while talking with peers in small groups these students may have increased their accumulation of constructs, altered existing constructs or fitted the constructs they had into a more encompassing pattern.

The affective consequences of cognitive change are an important aspect of adolescent development. Elkind (1967) describes how the alterations in personality which take place during childhood and youth are related to the stages of cognitive development described by Piaget. He suggests that each stage of cognitive growth frees the child from one form of egocentrism, but results in a different form of egocentrism. "From the developmental point of view, therefore, egocentrism can be regarded as a negative by-product of any emergent mental system" (1967: 1025). Adolescent egocentrism results from newly developed formal operational thought. Elkind proposes that formal thought allows the adolescent to conceptualize what is in the minds of other people. However, at this stage the individual "fails to differentiate between the objects toward which the thoughts of others are directed and those which are the focus of his own concern" (1967:1029). Elkind reasons that because of radical physiological changes the adolescent is primarily concerned with himself. Thus, "he assumes that other people are as obsessed with his behaviour and appearance as he is himself" (1967:1029). Elkind calls the adolescent's egocentric anticipation of the reactions of other people to himself "an imaginary audience" (1967:1030). Another

by-product of this egocentrism is a belief in his own uniqueness. Elkind refers to this as the adolescent's "personal fable" (1967:1031). According to Elkind, these manifestations of egocentrism are gradually overcome by interaction with others and by the establishment of close personal relationships. The study of adolescents in Grade VIII and Grade XI reported in the following chapters investigates the linguistic exchanges of adolescents who are at the age of greatest egocentrism as well as older adolescents who are likely to be less influenced by egocentrism. The influences of egocentrism are revealed in the analysis of the progression of the discourse.

Another aspect of adolescent development which is closely related to cognitive growth is the process of identity formation. There are various definitions of what constitutes a "sense of identity," but many would agree with Strauss (1965) that "identity is connected with the fateful appraisals made of oneself--by oneself and by others" (1965: 96). Erikson is a psychologist who has written extensively about identity in general and adolescent identity in particular. Erikson (1968) views identity formation as a largely unconscious lifelong development. Before the age of cognitive formal operations the child's sense of identity is closely associated with the people who most immediately affect him, mainly his parents and family. During adolescence there are many kinds of changes which may occur rapidly--physical, cognitive, emotional and social. The adolescent's attempts to adjust to these changes may be made difficult by the fluctuating nature of his sense of identity. It, too, must be restructured. Erikson (1968) suggests that in adolescence, changes in identity arise "from the selective repudiation and mutual

assimilation of childhood identifications, and their absorption in a new configuration" (1968:159). Erikson also suggests that the adolescent may need to experiment with different roles and to engage in what may be considered social play in order to accomplish the task of creating his own sense of identity. "The adolescent's ego development demands and permits playful, if daring, experimentation in fantasy and introspection" (1968:164). According to Erikson, the ability of the adolescent to achieve a stable sense of identity "depends to a significant extent on the quality of the opportunities and rewards available to him in his peer clique" (1968:165). This implies that a study of the ways adolescents communicate with each other in peer groups could yield information about how language may be used by adolescents to express and develop their sense of identity. In a section of the analysis of the discourse in this study, there is a description of references to identity observed in the talk of the adolescents who participated in the group conversations.

Psycholinguistics

Many studies of the relationship between thought and language depend on theories, information and methodology developed by both psychology and linguistics. In the last three decades the term psycholinguistics has been used to describe types of studies which involve both psychology and linguistics. In addition to the study of thought and language, a major part of psycholinguistic literature concerns the acquisition of language by native speakers (the "mother-tongue"). Hormann (1971) identifies the three central questions of psycholinguistics as the problem of meaning, the relationship between

thought and language, and the acquisition of language. Crystal (1976) comments, "The contemporary study of the acquisition of language by children has arisen out of the overlapping interests of psychologist and linguist" (1976:33). According to Slama-Cazacu (1973), studies of language acquisition are useful not only for developing the pedagogy of language teaching but also for developing theories of language in general. In a review of psycholinguistic developments during the early 1960's, Ervin-Tripp and Slobin (1966) defined psycholinguistics as "the study of the acquisition and use of structured language" (1966:435).

The interest in studies of language acquisition as a part of psycholinguistic investigations has resulted in numerous research projects regarding pre-school language development. Many investigators have followed Dale's (1972) strategy to "find a young child and listen" (1972:3). Publications by Weir (1962), Brown and Bellugi (1964), Braine (1971) and Halliday (1975) are evidence of real progress in the development of methods of studying child language and of success in producing valuable information. The results of these studies of the pre-school child indicate that studies of older children could be important as well. Some advancements have been made in studying school-age children. Chomsky (1969) found evidence that the ability to understand and use basic English structures such as some of the less common syntactic constructions, continues to develop in the early years at school. Moore (1975) tested seventh-grade students for their understanding of sentences. The results of the test suggest that children of this age have not completed learning some aspects of syntactically produced meaning. Tough (1976, 1977) reported on a project of the Schools Council in England

which investigated the communication skills of children in nursery and infant schools. Another Schools Council project reported on the language of primary school children (Rosen and Rosen, 1973). However, studies of school-age children are not as numerous as those of younger children. Carroll (1971) states: "Much more research . . . is needed before an adequate account of language development in the years beyond primary language acquisition can be drawn up" (1971:149).

Although studies of children's language development in the early school years are not numerous, they are more common than studies of language used by adolescents. Searches of the ERIC system and the Psychological Abstracts produced information on only two articles concerning normal adolescents. The descriptors were ADOLESCENCE, and LANGUAGE ARTS, LANGUAGE DEVELOPMENT, LANGUAGE RESEARCH, VERBAL or LINGUISTIC. One article (Peel, 1971) investigated the development of structures of meaning in the language of adolescents and found that in general, conceptual meaning does not develop until older adolescence. The other article (Elley, Barham, Lamb and Wyllie, 1976) described the results of an experiment which caused the authors to conclude that studying grammar does not improve the writing competence of adolescents. There are studies not mentioned in the abstracts under adolescence, such as that of Hunt (1965) and Bateman and Zidonis (1966) which present information about the written language of adolescents. Beirer, Starkweather and Miller (1967) analyzed the oral language of boys in Grade VI and Grade X for word-usage. They found no difference in variety of words used, but older boys spoke faster and used more of certain types of words such as "question" words. Scargill (1974) surveyed Grade IX

students and their parents on preferred usage regarding vocabulary items and idiomatic phrases. He found that Grade IX students used language forms known to previous generations, but not used by the parents of the Grade IX students. Loban's (1966, 1967) extension of a longitudinal study of children to a study of their language during adolescence is probably the most comprehensive source of information on adolescent language available at the present time. His study includes an analysis of oral interviews with the adolescents as well as analysis of their written work.

These studies of the language of adolescents are important contributions to a field of study which has not been well-developed. There is a need for additional information about the developmental processes which occur during the teen years. It is possible that the orientation to language and the methods of observation which are typical of the psycholinguistic studies of young children could be modified for use with adolescent subjects. The present study adapted some of the procedures originally used with younger children. Language produced in familiar surroundings and while engaged in an ordinary task was tape-recorded, transcribed and some of its features observed. This method is common in studies of the acquisition of language as carried out in psycholinguistic investigations.

Sociolinguistics

Questions concerning the interactions between language and culture or language and society have a long history of investigation in several disciplines. In the last two decades this field of study has sometimes been referred to as sociolinguistics. Shuy (1977) identifies

sociolinguistics as an investigation of language variation in real social contexts, particularly where there is "a high potential for relationship and application to other fields such as education, sociology, anthropology, and psychology" (1977:80). Luckmann (1975) presents the view that "the socialization of individual consciousness and the social molding of personality are largely determined by language" (1975:7). In addition, he observes that language is linked with culture and social structure in a variety of patterns. As Bauman and Sherzer (1974) explain with regard to their concept of an ethnography of speaking, "the patterning of language goes far beyond laws of grammar to comprehend the use of language in social life" (1974:6). Thus, a sociolinguistic study is concerned not only with language, but also with the social context in which the language is produced.

The impact which sociolinguistic research could have on educational practices was indicated by the papers presented at a conference on social dialects and language learning held in Bloomington, Indiana in 1964. Much of the conference proceedings focused on concern for children who did not use Standard English. Labov (1964) suggested that peer-group resistance to acceptance of Standard English could be a factor in blocking acceptance of its use. Haugen (1964) expressed the view that social reform may be a prerequisite to helping some children learn Standard English.

Bernstein (1970) has received much attention for his theory that class distinctions in England are accompanied by differences in language. He suggested that children from homes where the parents are unskilled workers may have a style of communication which makes school activities

more difficult for them than for children who are from middle-class homes. Bernstein sees a danger that the language used by working-class people may be discredited at school rather than seen as a variation which has a special value in the life of the speakers. This could result in the children rejecting the school program in order to preserve their sense of identity and self-respect. Bernstein also sees a possibility of children from middle-class families rejecting the language of the school as "phony, a system of counterfeit masking the absence of belief" (1970:175). These children may adopt the non-standard English of the peer-group subculture.

Two North American researchers, Labov and Shuy, have made observations which show that language variation according to the constraints of the social situation may also affect children on this continent. Labov (1964, 1966, 1969, 1970) made an extensive study of the language of adolescents in New York City as part of a larger sociological project. He found that many adolescents from homes with low socio-economic status used a form of English which was capable of conveying complex ideas, but was not accepted by the teachers in the schools. He suggested that this caused a conflict of values and loyalties which blocked learning. Shuy (1977) recommended research into the effects of social situation on language use among school students on the basis of his own experience. He recalled that in the blue-collar industrial community where he lived as a child, boys established their masculine identity by adopting tough language and by observing the following rules in school: "a. Keep your mouth shut in class . . . . b. If you give the right answer, counteract the 'fink effect' by sprinkling your response with stigmatized language"

(1977:89). Shuy suggests that social constraints of this type affect the school performance of students from middle-class, standard English speaking homes as well as those of the working-class. Consequently, studies of the language of school students in different social contexts would be "fruitful avenues of future research" (1977:88).

The present study of language used by adolescents provides observations of language used in two social contexts. One context is the small, single-sex peer-group. The second context is the peer-group with a teacher present. These two contexts represent the major differences in social situation which occur within the classroom environment.

Literature Related to the Educational Setting

The need to reform school curricula is a common topic among educators. Booth (1971) commented, "Educational revolutions have always come five new pence a dozen in America especially in the twentieth century" (1971:4). However, in the same article Booth suggests that old battles over such things as the child-centred curriculum versus the subject-centred curriculum "become more acute in the new social context" (1971:4). New, more aggressive competition from the culture outside the school is forcing changes. New advances in the major disciplines also create a need for changes in both method and content of instruction. Booth expresses the view that new perceptions of English and the teaching of English such as those presented to the York International Conference on Teaching and Learning in 1971 could revolutionize not only language teaching, but the teaching of all other subjects as well.

The approaches to language and language teaching to which Booth

refers have been explained and described in the many publications of British educators in recent years. Dixon's (1967), Growth Through English, was developed from presentations of the British participants at the Dartmouth Seminar, an invitational conference concerning English in education. In the preface to a 1975 edition of this book, Squire and Britton (1975) state the following:

> The developmental view presented in Growth Through English forced attention to the processes of interaction through which children acquire competence or expressiveness in language and strengthened conceptions of the teacher's obligation to guide and foster this development.

A conference of the London Association for the Teaching of English (LATE) in May, 1968 led to the compilation of Barnes, Britton and Rosen's (1969) Language, the Learner and the School. LATE also produced a discussion document called "A Language Policy across the Curriculum" which was included in Language, the Learner and the School (1969:160).

The Schools Council, a British agency which sponsors educational research projects, encouraged investigations of the role of language in education by selecting English as one of its three top priority areas. James Britton directed a Schools Council project which published The Development of Writing Abilities (11-18). Another project, The Schools Council Programme in Linguistics and English Teaching, produced an innovational set of practical plans for teaching about language called Language in Use. A "Writing Across the Curriculum" project directed by Nancy Martin produced Writing and Learning across the Curriculum (11-16) (Martin, D'Arcy, Newton and Parker, 1976). Another three-year project investigated the needs and possibilities for a new approach to English for older youth. Dixon, Brown and Barnes (1969) published the results of that study in Education 16-19: The Role of English and Communication.

Not all of the responses to these projects and publications were positive. Severe criticism of the schools for poor teaching of English and special criticism of the "trendy" new approaches resulted in the establishment of "A Committee of Inquiry" by the British government. The report of the committee, A Language for Life (Department of Education and Science, 1975), incorporated many of the suggestions which had developed from the Schools Council projects. However, this did not satisfy all the critics. At the end of the report there is a "Note of Dissent by Mr. Stuart Froome," which affirms Froome's belief that standards of English usage are declining, partly because of the changes which are taking place with regard to the teaching of English.

There are indications that many British teachers would reject Mr. Froome's statement and be more receptive to Lawton's (1978) view that "Language in education should be seen as an integral part of curriculum reform" (1978:50). A Schools Council booklet, Language Policies in Schools (Allen, et al., 1977), discusses Language for Life (The Bullock Report). The following comments by the authors imply acceptance of a new movement:

> It became clear that, as the Bullock Report had indicated, we were all only at the beginning of an important direction in education with regard to the role played by language: teachers of all subjects were, and are, being asked to consider how the talking and writing they ask their pupils to do affects what and how they learn. (Allen, et al., 1977:3)

Educators on the North American Continent have also been responding to new developments in the study of language by investigating the implications of these developments for school programs. In 1958, Martin Joos presented 38 teachers at a University of Alberta summer class with new insights into the different styles of language which are used in different

situations. He published this analysis of English usage in The Five Clocks (1961). The National Society for the Study of Education chose language as the topic for the 1970 yearbook, Linguistics in School Programs. The National Council of Teachers of English (NCTE) has published a series of research reports. Hunt's (1965) Grammatical Structures at Three Grade Levels and Emig's The Composing Processes of Twelfth Graders are examples of the innovative nature of these reports. NCTE also published The Learning of Language (Reed, ed., 1971), which surveys the developments in language study which relate to the educational milieu.

Two Canadian studies of adolescent's use of language while attending classes in school have added important information to the literature concerning adolescents' language. Searle (1975) tape-recorded the language experiences of five students during their regular classes. He identified examples of expressive language which the students used in discussions to clarify and develop meaning. According to Searle, "New material is first approached in the expressive mode and then as understanding and language develop, the language can become more specialized" (1975:284). Taylor (1977) tape-recorded and analyzed the conversation of adolescents as they talked in small groups about literary works. One of Taylor's conclusions was that "analysis of student discussion is a fruitful method for examining response to literature" (1977: 115).

The need for new approaches to program development is being articulated by many who are neither linguists nor English teachers. Studies of language as it is needed in all areas of the curriculum could contribute to a better understanding of how school programs in each

subject area might be improved. For example, when Bruner (1966) suggested that, "Instruction is a provisional state that has as its object to make the learner or problem solver self-sufficient" (1966:283), the question of what language capabilities the learner has to become self-sufficient arises. Eisner, who comes to curriculum planning with the experiences of a teacher of art, presents the view that "Knowing, like teaching, requires the organism to be active and to construct meaningful patterns out of experience" (1979:271). Constructing meaningful patterns may occur through the activities of an art class, but students talking and writing are also constructing meaningful patterns. In the search for curriculum reform, the place of language in the school program is a vital consideration. However, an informed assessment of language as it relates to learning will be difficult to establish until more is known about the language development of children and adolescents.

Chapter III

DESIGN OF THE STUDY

Overview of the Design

This study was designed to investigate some features of the spontaneous language which adolescents prefer to use in an informal school situation. The procedure adopted was to record adolescents talking in groups of three in a classroom context. Four minutes of the recorded conversations of eight groups in Grade VIII and eight groups in Grade XI were transcribed. In addition, a teacher joined each group for fifteen minutes. Four minutes of the talk of each group when the teacher was present were transcribed. Four different types of analysis of the talk produced information about the following:

1. the number and mean length of each type of syntactic unit;
2. the range of vocabulary;
3. the kinds of uses made of language;
4. interaction features and group processing of ideas and information.

The Population and the Sample

The Population

The population was made up of five regularly scheduled Grade VIII classes from schools in Alberta and five regularly scheduled Grade XI classes from schools in Alberta. All classes were either of mixed ability or rated by their schools as of average ability. At each grade

level three of the classes were located in the City of Edmonton and two were located in a small town in a farming district.

Each class was divided as nearly as possible into groups with three students in each group. This produced a total of 53 complete Grade VIII groups (159 pupils) and 52 complete Grade XI groups (156 pupils).

For the students-with-teacher context, teachers from the school but not at the time teaching that class were asked to participate. Current teachers of the students were excluded so that the students would not feel pressure to please the teacher. The number of teachers available was limited, so not all of the groups were recorded in the students-with-teacher context.

The Sample

From these recordings it was intended to randomly select for transcription eight tapes at each grade level. However, the following factors reduced the possibilities for random sampling:

(a) difficulties with management of the tape-recorder made some tapes inaudible or incomplete;

(b) some tapes had to be discarded when the matching recording of the with-teacher context was too short or inaudible.

In addition, to get an equal representation of types of students the tapes were sorted as follows:

(a) male and female categories;

(b) rural and urban categories.

As a consequence of these restrictions the number of suitable tapes in each category was quite small. In most categories there were

only from one to four tapes more than the number required. The sample was obtained from a random selection within each of these categories of grade, sex, and school location. In the Grade VIII, rural, girls category only one group recorded with the teacher for the specified time. Since two transcripts were required from this category, two minutes were transcribed from each of two groups in each context. These were combined to make a transcript of four minutes in each context.

The transcripts consist of four minutes of transcribed conversation taken two minutes before and two minutes after the mid-point of the peer-group only discussion, plus two minutes before and two minutes after the mid-point of the peer-teacher discussion. In the combined Grade VIII girls' transcript, the conversation was taken one minute before and one minute after the mid-point of the peer-only and peer-teacher discussions of two groups.

The transcripts present the talk of eight groups (24 students) of each grade in both the students-alone context and the students-with-teacher context. The total amount of language transcribed for analysis was 126 minutes of recorded tape. This produced approximately 18,000 words spoken by the adolescents.

Taping and Transcription

Taping

The choice of procedures for acquiring this language sample was influenced by the premise that language analysis is more satisfactory when it "draws its samples from speech of subjects unaware of observation" (Webb, Campbell, Schwartz and Sechrest, 1966:128, 129). However, practical difficulties as well as legal restrictions interfered with

completely achieving this goal. To approximate as closely as possible the ideal of "subjects unaware of observation," the strategy of recording a group conversation was adopted.

> Although it would seem difficult to induce people to speak normally while a tape-recorder is operating, it has been found that when speakers are interviewed in groups, the social obligations among members frequently lead them to disregard the recording instrument and to behave as if they were unobserved. (Gumperz and Hymes, 1972:25).

The effects of the social situation in this study appeared to follow the pattern observed by Gumperz and Hymes. Although students referred to the tape-recorder, their references were brief. Comments such as ,"Is that thing still going?" indicated a feeling the tape-recorder was somewhat removed from the group. An unexpected aspect of the taping was that groups in the classrooms where they were surrounded by other groups appeared to have less difficulty sustaining animated conversation than the groups assigned to the privacy and quietness of seminar rooms. Some students in the midst of the noisy classroom apparently entirely forgot about the tape-recorder. One Grade VIII girl said, "We're getting a 26 for the weekend. We're getting it from . . . ." She was abruptly silenced by another person in the group. It seems likely that the girl who stopped that part of the discussion suddenly remembered the presence of the tape-recorder.

Participants were assigned to single-sex groups to encourage freedom to talk naturally. Barnes and Todd (1977:86, 87) observed that children who have not had experience working in small groups find the situation in single-sex groups more familiar than the mixed-sex groups.

In the with-teacher context, measures were taken to make the experience as unconstrained as possible. To lessen the possibility that

students might feel they were being evaluated and to lessen the authoritarian image of the teacher, only teachers not at the time teaching that class participated. In addition, teachers were asked to talk with the students just as informally as if they had met them in a cafeteria or on a bus.

A film was chosen as a stimulus for the discussion because it was likely to appeal to both grades and would be of interest to all types of students. Lifestyle was the film shown. It had been broadcast on television and appealed to a wide variety of interests and backgrounds (see Appendix C). In a pilot study designed to ascertain the effectiveness of the procedures, the film Lifestyle stimulated many different kinds of discussion. It presents an extensive range of information, so the students were able to select which aspect of Lifestyle they wished to discuss.

The researcher visited each of the classes participating in the study on two occasions. At the first session, pupils were assigned to single-sex groups of three persons. Each group received a tape-recorder with an external microphone. The entire class received directions about how to operate the recorder and were allowed time to familiarize themselves with its use.

The students were not told that their use of language would be analyzed. Instead, they were shown the film and told that their visitor wanted to know "what you have to say about the film." A copy of the instructions for students and a copy of the discussion guide are in Appendix A.

In the pilot study, the recordings were made in one session.

This created many difficulties, so this study added a second session to make it possible to have an orientation session. The film Lifestyle is divided into two parts. In both sessions the students viewed one part of the film first, then divided into groups and talked around the single microphone in each group. Teachers were not available for Session A, the familiarization session. During Session B, teachers viewed the film with the class. They were then randomly assigned to groups for fifteen minutes. At the end of fifteen minutes each teacher moved to a different group. It was anticipated that this would provide an equal number of groups who talked with peers-only first as groups who had a peer-teacher session first. At the Grade VIII level this plan was carried through. At the Grade XI level, five groups met with the teacher first and three groups met with peers-only first.

Transcription

Transcription was difficult because of the technically poor quality of some of the recordings. Some groups chose to ignore the tape-recorder, so the microphone was sometimes not in the most advantageous position for picking up voices. Because ten to twelve groups recorded in one room, there was frequently a considerable amount of background noise. Accurate transcription of the tapes was aided by the use of two machines in the Linguistics Laboratory at the University of Alberta. The Sony Integrated Amplifier (TA-1066) made it possible to hear faint voices. The Rockland Programmable, Dual Hi/Lo Filter (Series 1520) could be adjusted to eliminate high or low frequencies. Thus, the transcriber could adjust the dials so that the main frequency of one person's voice could be emphasized, and other frequencies deleted. This

assisted in eliminating background noise and in distinguishing each voice when two people talked at the same time.

The following are the steps taken to transcribe each tape:

1. the transcriber listened to the whole tape several times;
2. the transcriber identified the mid-point of the conversation and selected two minutes preceding the mid-point and two minutes following the mid-point (Lafayette Stop Clock 54014);
3. the first draft was transcribed for utterances only;
4. each utterance was identified according to the person speaking;
5. the first draft was checked and revised;
6. second transcriber checked the transcript;
7. the first and second transcribers compared differences in their transcripts and made final decisions where there was a discrepancy;
8. the final draft was typed.

The Analysis of Syntax

The T-Unit Measure

In studies of written communication across several grade levels Kellog Hunt (1965) found that a count of the average number of words in a T-unit (one main clause with all the subordinate clauses or structures attached to it) could be used to assess syntactic maturity. Walter Loban (1966) used a similar measure which he called a communication unit. Numerous studies using the T-unit length as a measure have shown that it reveals the same developmental patterns as more elaborate and cumbersome measures such as the average number of sentence-combining transformations per T-unit. Two comments of O'Donnell are pertinent:

> The mean length of T-units has special claim to consideration as a simple, objective, valid indicator of syntactic control. (1976:98)

> It should be of considerable interest to other researchers that the average number of words per communication unit is almost as sensitive as the weighted index of elaboration . . . . Given the fact that the communication unit and the T-unit are practically identical, the conclusion of O'Donnell (1976) that the average number of words per syntactic unit may be the most useful and useable index of syntactic development over a wide age-range seems to be further supported. (1977:51)

Although the T-unit measure is useful for written communication, it does not completely account for the many kinds of linguistic fragments which are essential parts of informal conversation. In the oral language studied by Loban, he identified the non-T-unit utterances as mazes and defined them as "a series of words (or initial parts of words) or unattached fragments which do not constitute a communication unit and are not necessary to the communication unit."

In this study, the participants interacting with each other produced many sentence fragments. This increased the problem of how to classify the constructions which did not have a regular T-unit structure. After experimentation with several modifications of Hunt's and Loban's procedures, a system of categorization which accounted for every utterance was developed. This system is described in the following section, "Syntactic Categories."

Syntactic Categories

1. T-unit

   A T-unit consists of a complete main clause and all subordinated clauses attached to it. When two T-units are separated by a coordinating conjunction, the conjunction is counted as part of the second T-unit.

Example: That is what she is saying, (first T-unit)
but that's not what I'm saying (second T-unit).

2. Partial

A partial is a group of words which makes sense or which has meaning of some kind for the conversation, yet it lacks the completeness of a T-unit. It may differ from a T-unit by missing a subject or it may have a subordinating conjunction before a complete clause.

Example: "Like when they did the generation group."

3. Incomplete Partial

The incomplete partial begins as a sensible statement, but the speaker is interrupted by another speaker.

Example: "What they think is going on instead of just . . . ."

4. Edit

Edits are groups of words repeated, or words inserted in a T-unit, but not part of it. To be an edit, the words must be surrounded by or followed by a successful partial or T-unit. It differs from a tangle because a tangle is simply dropped and is not followed by a similar, better-constructed utterance.

Example: "Like she was, she was outdoor going." Edit is,
"Like she was."

5. Tangle

A tangle occurs when the speaker's words do not appear to have meaning. The speaker usually just stops speaking or may drop the construction and start over again on a different type of construction.

Example: "Because I don't think like we could." (Tangle, followed by T-unit. "It would be a very drastic change for us.")

6. Hold

Where words are used to fill in, or to hold the speaking role while thinking up what to say next, they are designated "hold."

Example: "You know."

Note: "You know" may function as a partial to indicate the following: a) "Isn't that true?"; b) "It is a fact that"; c) "You know that what I am saying is true"; d) "Do you know what I mean?"; e) "Did you know?" When it is categorized as a hold it has no apparent semantic content.

7. Non-lexical

These are sounds which function as fillers and holds, but they are not recognizable words in English.

Example: "Uh."

Analytical Procedures

The conversation in each transcript was copied on a chart so that each syntactic unit fell on a separate line. Opposite each unit the syntactic category and the number of words in that unit was recorded. A sample page of the chart is in Appendix E.

Counts were made on the number of occurrences of each syntactic category and the mean number of words per unit in each category.

Reliability of the Analysis

A second-year university student studied the definitions of the categories and discussed them with the researcher. After an hour of discussion and practice on two of the transcripts she took four randomly selected transcripts and charted them according to the syntactic category definitions. Of the 593 syntactic units in the four transcripts, the check coder agreed with the researcher on 531 units. The percentage of agreement was calculated as follows:

$$\frac{\text{Number of units categorized identically}}{\text{Total number of units categorized}} \times 100 = \% \text{ agreement}$$

Using this method of calculation, the check coder agreed with the researcher on 89.54 percent of the units.

Some of the items of disagreement were ambiguous. For example, "You know that film," was interpreted by the check coder as a T-unit. The researcher judged that it was an introductory phrase and categorized it as a partial. Most apparent ambiguities were solved by careful attention to the content and the context.

The Analysis of Breadth of Vocabulary

Type-token Measure

This measure is found by counting the number of different words used (types) and comparing this with the total number of words (tokens). This yields information about whether the speakers use a limited number of words over and over or if they use a wide vocabulary.

Segmentation for Type-token Measure

One problem associated with this measure is that the number of new words used decreases as the sample becomes larger. To establish a clear pattern of the variety of words used by each group, the transcripts were divided into segments containing 100 words. In each segment, the words which had not appeared before in any preceding segment were counted. This was the system used by Loban (1966:13, 14).

The Analysis of Functions

Background to the Development of Categories

An important feature of language is the way we use it to serve different purposes or functions. Among linguists there is increasing attention to study of this aspect of language. Several works of the Prague linguists in the 1920's initiated this interest. It has been developed more extensively in Eastern European countries than in North America, but English-speaking linguists have recently been placing more emphasis on what has been called functional linguistics. Margarita Kozina describes the trend as follows:

> Stylistics--and one may say the history of linguistics in general--is characterized by a gradual shift of interest from describing and studying phenomena in statics to the explanation of their dynamics and the regularities of their functioning . . . . Complete knowledge of language is unthinkable without the study of its use, for it is known that in this case it is the potentials and properties of language (though in a functional sense) that are being discovered. (Kozina, 1976:51)

The significance of this movement for education may be estimated from just one of the results of this research. Kozina claims there are regularities of functional style which "manifest themselves with the

sequence and effect of a law" (Kozina, 1976:58). Kozina devised a formula for finding a coefficient of abstraction and a coefficient of concreteness for written work. Using Russian protocols, she found that for the fiction, "belles-lettres" style, the coefficient of abstraction is .76 and the coefficient of concreteness is .24. In scientific writing the abstractness coefficient is .30 and the coefficient of concreteness is .70. This gives insight into the complexity of the tasks demanded of children in school and the difficulties encountered by teachers who are helping children to develop their reading and writing abilities.

In the English-speaking world, several British researchers have turned their attention to a study of the functions of language as a way of understanding how language is learned, and of how language is used in learning. Some of the most prominent of these are M.A.K. Halliday, who was Director of the Communication Research Centre at the University of London; Joan Tough, of the Leeds Institute of Education; and James Britton, Director of a Schools Council study of the writing abilities of children and adolescents.

Halliday has explored the study of functions as a way of investigating the developmental stages exhibited by children as they learn their mother tongue. Basic to his strategies is the concept of language as a system of meanings, and of learning language as "learning how to mean" (1973:24). Halliday contends that the semantic system of an adult develops from the child's experiencing language used for different functions as well as from the child's experiences with the semantic content of words.

> The child learns language as a system of meanings in functional contexts, these contexts becoming, in turn, the principle of organization of the adult semantic system. (1975:9)

Joan Tough, of Leeds University, uses function categories as a way to assess both the child's stages of verbal development and his developing conceptualization of the world around him.

> Our interest lay, therefore, in the way in which language functioned to express and construct different kinds of meanings, meanings that would reflect the child's awareness, appreciation and interpretation of the social world around him. (Tough, 1977:39)

In the Schools Council study directed by James Britton, function categories were used in a very practical way as "a sorting system which throws light on development" (Britton, Burgess, Martin, McLeod and Rosen, 1975:5). By assigning a function category of 2122 pieces of writing from 65 secondary schools, Britton and his colleagues were able to suggest the stages by which school students develop the ability to modify their writing to meet the demands of different situations.

In North America, Walter Loban used function categories as one of the ways of analyzing language spoken and written by children who were in a longitudinal study which he directed. One of the purposes of the study was to distinguish the characteristics of high achievers as compared to low achievers. He developed categories designed to make that distinction.

These studies indicate that the use of function categories can provide useful information for researchers concerned with the development of language in an educational setting. However, there are significant problems associated with this type of analysis. First of all, it is difficult to find a set of function categories which will produce the information which the researcher may be seeking.

> Various people have made lists of language functions, but there is as yet no agreement as to how many significant uses

> we should take account of. It depends partly on the purpose for which we want to use the list, partly on how detailed we want it to be. (Wilkinson, 1975:54)

Comparison of studies done by Tough (1977) and Halliday (1975) indicate that the types of categories which are needed may change from one age to another. In addition, Loban (1963) suggests that the whole context of the communication affects the kinds of functions for which language is used.

> The content of communication varies so greatly with the situation in which it occurs that no universal set of function-classifications has emerged from research. (Loban, 1963:11)

Another major problem associated with function categories occurs because of the complex nature of language. Linguists suggest that any one unit of discourse usually serves a number of functions. Halliday sees this as an important difference between the utterances of young children and adult language. He has observed that for the very young, each utterance serves just one function. However, utterances in the adult language are functionally complex: "Every adult linguistic act, with a few broadly specifiable exceptions, is serving more than one function at once" (1973:34).

Joan Tough found that even where children are concerned each of the child's utterances could serve more than one function. She found it useful to establish two main categories--relational and ideational. In addition, she subdivided the "ideational" into the directive, the interpretive and the projective functions. In assigning an utterance to a category, she focused on "the kinds of meanings that the child was attempting to convey" (1977:46).

In spite of the difficulties, this researcher chose to assign

each T-unit in the transcripts to a function category. Because this study is concerned with investigating the ways adolescents use language for learning, a set of categories which would relate to strategies for learning was chosen. To reveal developmental trends, consideration was also given to a classification which might reveal differences between Grade VIII and Grade XI. The categories developed are, to a large extent, an attempt to project into the adolescent developmental stage, categories which have been useful with younger children. Halliday's "Relevant Models of Language" (1973:9) and Tough's "A Framework for the Classification of the Uses of Language" (1977:68) were considered useful models. However, neither of these was able to satisfactorily account for all of the uses adolescents made of language. To develop a form of analysis suitable for adolescents, it seemed necessary to find other categories.

The Schools Council team led by James Britton devised a set of function categories for adolescents which distinguishes between language which operates to get something done in the situation (participant role) and language which presents an experience or a commentary for the purpose of offering an evaluation of the events constructed and seeking corroboration from the listener (spectator role).

> To sum up: when we use language to recount or recreate real or imagined experience for no other reason than to enjoy it or present it for enjoyment, we are using language in the role of spectator; when we use language to get things done, we are in the role of participants. (1975:91, 92)

In Britton's study, protocols which were clearly participant were put in a "Transactional" category and those which showed a definite form or pattern in the spectator role were put in the "Poetic" category.

In between the two main categories they identified an "Expressive" category.

> An expressive category, for our purposes, is one in which the expressive function is dominant . . . . We would describe it as an utterance that 'stays close to the speaker' and hence is fully comprehensible only to one who knows the speaker and shares his context. (1975:81, 82).

Britton's categories are not directly applicable to conversation, because in Britton's terms most of the conversation would be expressive. However, the identification of the spectator and participant roles proved a useful concept to separate the students' talk about the immediate situation ("Statements for the Purpose of Operating in the Situation") from their reminiscences about the film or about their recall of other kinds of experience ("Statements for the Purpose of Organizing and Reflecting on Experience").

In addition to considering the possibilities for classification suggested by the studies cited, Loban's technique of studying the transcripts for evidence of types of functions was also used to develop the system used in this study. A process of "trial and error" was necessary before the scheme evolved into its present form.

To overcome the problem of each utterance serving more than one function, the concept of a hierarchy of functions as proposed by Jakobson was utilized. Although each utterance may serve several functions, Jakobson contended that there would be a dominant function in any utterance (1960:157). Thus, to assign a T-unit to a function category, the function most fully served by the utterance was used to decide the category.

When selecting the most appropriate category for a T-unit it was also essential to consider more than the T-unit in isolation. Discourse

in the transcripts is not clearly organized. Utterances blend into one another as the conversation flows from one person to another. As a result, the assignment of a T-unit to a function category was based on its place in the whole unit of discourse as well as on the features of the T-unit itself.

When a T-unit has several clauses of mainly equal information it is sometimes possible for the T-unit to fit the definition of more than one category. In such cases, the main clause was used to determine the category.

Outline of Function Categories

I. Statements for the Purpose of Operating in the Situation

A. Statements for Management of the Context

1. Commands
2. Information Statements

B. Interactional Statements

1. Supportive Responses
2. Elicitations
3. Disagreement Responses
4. Insults
5. Threats

II. Statements for the Purpose of Organizing and Reflecting on Experience

A. Reporting and Recall Statements

1. References to the Past
2. References to the Present

B. Low-level Generalizations

C. Speculations

D. Universal Generalizations

E. Statements Alluding to Personal Feelings, Experiences or Assessments

III. Statements Expressing Inventive Locution

A. Role-playing Statements

B. Word-play Expressions

C. Expressions of Fantasy

IV. Irrelevant Statements

Definitions of Function Categories

I. Statements for the Purpose of Operating in the Situation

A. Statements for Management of the Context

T-units placed in this category refer to what is happening within the situation where the talk is being recorded. The language is used to participate in some way in the on-going events and in the context of the moment of speaking.

1. Commands

T-units in this category give instructions or require some kind of action. They usually contain a demand word.

Examples: "Don't turn the tape-recorder off."

"Well, let's get on to the next question."

2. Information Statements

These T-units give information about what is happening or about the situation at the time the utterance is spoken. They may also request information pertaining to the immediate situation.

Examples: "I said his name twice."

"Where is the last question?"

B. Interactional Statements

The primary function of these T-units is to relate in some way to another person.

1. Supportive Responses

These statements agree with or encourage the previous speaker. (If they are combined with a longer statement, the T-unit is assigned to the category most suitable for the longer statement. For example, "I agree that he's really causing a lot of problems," would be assigned to II.B. rather than I.B.1.)

Examples: "Yeah, I agree."
"Is that a fact?"
"I don't know (I dunno)."

2. Elicitations

These statements encourage response from another person. Usually they include <u>you</u> in a question. Requests for information are included in this category.

Examples: "What do you think of that film?"
Tag questions--"Wasn't it?"

3. Disagreement Responses

These T-units express negative reactions to the previous utterance.

Examples: "I don't think so."
"No, that's not true."

4. Insults

Deliberate negative statements about another person in the group.

Example: "You are a pimple."

5. Threats

The speaker asserts his own position by threatening another person.

Example: "I'll slap you both out."

II. Statements for the Purpose of Organizing and Reflecting on Experience

A. Reporting and Recall Statements

1. References to the Past

These statements recount or recreate real or imagined experience. They refer to observations of things, sensations, events or circumstances of a concrete nature which were in the film or in their own past experience.

Examples: "Did you see those guys who were all in bathing suits?"

"That guy said, 'We've no place to park.'"

2. References to the Present

These statements give information about current circumstances which exist at the time of speaking, but are removed from the group and not observable by them as they talk. These T-units could also refer to current habitual occurrences or assertions of knowledge or lack of knowledge.

Examples: "He's got a bunch of new money."

"We drive around a lot."

(To distinguish between II.A.1. and II.A.2., consider the tense in the main clause of the T-unit. However, any reference to the film or similar past experience should be placed in II.A.1.)

B. Low-level Generalizations

These statements are one step from straight recall in the direction of abstraction and evaluation. These generalizations refer to specific events, procedures, situations or persons. This category includes generalized statements about the film as well as personal opinions, value judgments, simple inferences, implications and classifications. (Undissociated references. See Peel, 1975:177-188.)

Examples: "He seems like a greedy man, to me."

"It's really good for water-skiing because its so slippery."

"She's doing too much."

C. Speculations

These are statements about what might happen in the world or general alternatives to what has happened. The speaker looks at the possibilities of life. Probably is often used in these T-units.

Examples: "I wonder if that old man is still living?"

"Why couldn't they make a car that ran on water?"

"We would probably all just sit there."

D. Universal Generalizations

These are statements of universal principle which imply extrapolation from a wide area of experience and are applicable to a wide area of experience. Usually, these T-units are embedded in related discourse. They do not refer to a specific person, place or thing. (Dissociated references. See Peel, 1975:177-188.)

Examples: "You have to impose laws to get people to stop polluting."

"People have to step on other people to get it."

E. Statements Alluding to Personal Feelings, Experiences or Assessments

These T-units refer in some way to the personal, unique life of the speaker. They reveal information about personal beliefs, interests and values. They may be personal reflections on past experience. To be in this category, T-units should have subjective expressions of feeling or self-revelation. Personal opinions are assigned to the II.B. category.

Examples: "They make me so mad."

"I'm not like that now."

"I don't really have anything else to say."

III. Statements Expressing Inventive Locution

A. Role-playing Statements

In these T-units the utterance indicates the speaker is pretending to be another person at another place or time.

Example: "This is station QXR, 3, 4."

B. Word-play Expressions

In these T-units there is evidence that meaning is subordinated to the sound of the words or to the use of words which have an amusing double-meaning (puns).

Example: "Does green wood burn?" (Referring to the surname of a person, Greenwood.)

C. Expressions of Fantasy

These statements are made in a manner and in a context which

indicate the speaker presents them as a type of fiction.

Example: "We'll all become actresses."

IV. Irrelevant Statements

There is no evidence that these statements are in any way related to the discourse.

Example: "Would you want a kangaroo for supper?"

Assignment to Categories

To simplify the categorization procedure, the charts which were developed for the syntactic analysis were also used for function category placement. Each T-unit on the charts was identified as belonging to one of the function categories (see Appendix E).

Reliability of the Categorization

In order to determine the reliability of the categorization, the researcher obtained the assistance of a lecturer in English at the University of Saskatchewan. For training, the researcher and assistant categorized two transcripts cooperatively. Next, the assistant and researcher independently categorized two transcripts and compared the results. For the estimate of reliability, five additional transcripts were categorized by the researcher and assistant independently. The percentage of agreement was calculated as follows:

$$\frac{\text{Number of T-units categorized identically}}{\text{Total number of T-units categorized}} \times 100 = \% \text{ agreement}$$

Some transcripts were easier to categorize than others, so the percentage of agreement varied according to the style of talk in the

groups. The percentage of agreement for each of the transcripts was as follows:

1. Transcript VIII C -- 73.21
2. Transcript VIII F -- 73.21
3. Transcript VIII G -- 65.71
4. Transcript XI K -- 78.46
5. Transcript XI M -- 84.26

Several factors affected the decision regarding the category to which each T-unit was assigned. Since much of the conversation was about the film Lifestyle, knowledge of the film was an advantage when deciding the main intent of an utterance. Secondly, much information about the utterance could be gained from the pitch, intonation, stops and stresses audible on the tapes. Since the research assistant who checked the reliability of this sample did not have experience with either the film or the tape-recordings, the degree of reliability was probably lower than it would have been if the check-coder had seen the film and listened to the tapes.

Analysis of the Progression of the Discourse

Theoretical Background for the Analysis

In both linguistic research and curriculum research, analysis of language as it is progressively created by the interchange of two or more individuals is becoming of increasing interest. Study of language in action could be compared to the biological study of live specimens in their natural habitat. Just as the biologist acquires additional information from this kind of study to add to that gained by studies made of specimens preserved in a laboratory, so there is interest in language as it operates over a continuous period of time in real situations

as well as language when it is divided into small, well-defined units. In this part of the present study, the focus is on the language produced as the conversation progressed during the entire four minutes of the transcribed portions of the tapes.

From a linguistic point of view, Firth (1935) extended Malinowski's (1923) view that the context of a situation is of paramount importance and suggested that a study of ordinary conversation would probably be a way to gain an understanding of what language really is and how it works. Sinclair (1966:151) drew attention to "the paramount importance of dynamic situational description." Sinclair and Coulthard (1975) submitted a report to the British Social Science Research Council which analyzed samples of classroom language in order to evolve a general system of oral discourse analysis. They also experimented with systems for research into the language used in doctor-patient interviews, industrial committee meetings and television discussions.

The importance of looking at the progressively created dialogue of children as part of developing curriculum theory is articulated by Barnes in From Communication to Curriculum:

> Orthodox curriculum theory derives its analysis of curriculum process from the teacher's objectives; I have argued here that, since the learner's understandings are the raison d'etre of schooling, an adequate curriculum theory must utilize an interactive model of teaching and learning. Thus this discussion of communication is intended--over and above its practical relevance--to be a critical contribution to curriculum theory. (1975:preface)

Barnes demonstrates his view of the relationship between language and curriculum by presenting transcripts of teachers and children talking in school. His commentary on the transcripts answers questions such as, "What part do the learners play in the formulation of knowledge?" and

"Where does speech come in this?" (1975:18).

In selecting features for investigation from the progression of the discourse in the transcripts of the present study, those features related to curriculum development were emphasized more than features which might contribute to an understanding of strictly linguistic operations. Studies of adolescent children's conversation by Britton (1969), Dixon (1974) and Barnes and Todd (1977) were consulted to assist in formulating a method of analysis.

Britton (1969) tape-recorded, transcribed and commented on the language produced by several small groups of secondary school pupils. The commentary pointed out ways that the speakers had used language in the process of learning. Britton's view of learning is not confined to that of adding facts or neatly defined generalizations to the person's cumulative representation of the world, a representation built on past interactions with his environment and acting as a "predictive apparatus" (Britton, 1970:193). His analysis of children's transcribed talk points out the developments which take place in their comments about the topic and includes references to the slow, circular development of a concept which sometimes occurs in the conversations.

Dixon (1974) focused on "the processes of formulation in group discussion." From a transcript of four pre-teen girls discussing a poem, he delineated the steps by which they formulated their responses to the poem. He suggested that this type of investigation into group processes could contribute to a theory of dialogue as a mode of learning and teaching.

Barnes and Todd (1977) stated that the underlying purpose of their study was to examine the relationship between short-term, small-scale aspects of the social interaction of small groups and the cognitive

strategies generated in the course of this interaction. They taped and transcribed the talk of thirteen-year-olds in both mixed-sex groups of four and single-sex groups of three. They based their analysis on the assumption that speech functions as a means by which people construct and reconstruct, often jointly, views of the world about them. They carried out an investigation of the interplay between cognitive and communicative functions of speech in contexts planned for learning. One example of their style of analysis is found under the heading, "Collaboration in the Groups." After quoting from two groups, they point out that in the dialogue are examples of the following:

--initiating discussion of a new issue

--qualifying another person's contribution

--implicitly accepting a qualification

--extending a previous contribution

--asking for an illustration to test a generalization

--providing an example

--using evidence to challenge an assertion

--reformulating one's own previous assertion (1977:27).

The type of approach used to analyze the progression of the discourse in the present study is derived from the techniques used in the studies mentioned above. It is designed to describe some prominent features related to language used in the process of learning. The following questions were formulated to identify the features to be described:

1. What are the main topics of conversation?
2. How is participation in the conversation organized and distributed within the groups?

3. To what extent do the students make statements about personal experiences, personal identify and personal values?
4. What language competencies do they use to share information and develop concepts?

Procedures in the Analysis

As a first step in this analysis, the researcher wrote a description of each transcript (see Appendix G). The headings in the description relate to the questions given above. The following is a list of the headings together with the factors which influenced the nature of the description given under each heading.

1. Overview. Each group had unique characteristics which affected the general impression created by their conversation. The overview included a description of these characteristics as well as an indication of the general tone of the group talk.
2. Topics. When three or more utterances by different members of a group alluded to a similar referent, this was considered a topic.
3. Participation of Individuals. The distribution of conversation among the three students as well as the length of utterances constituted the main features described under this heading. The extent of continuity from one utterance to another was also included.
4. Personal References. This section identified examples of students relating new information to their own experience and world view, of students indicating awareness of personal identity, and of students expressing and modifying personal values and attitudes.

5. Language for Learning. To select the features appropriate for this category, consideration was given to a statement by Doughty and Doughty (1974) that "Language for Learning" is the label they use to refer to "all those ways of speaking which are required by the activities and processes of formal education" (1974:77). In addition to the Doughty concept of "Language for Learning," the present study interpreted this term as referring to the ways students use language for the expression of meanings which could be related to cognitive development. The following were identified as types of "Language for Learning":
   (a) introduction of information by reference to the film or by reference to previous experience;
   (b) elaboration of ideas by one student adding to another student's contribution;
   (c) clarification of references to the film, references to past experience and clarification of word meanings;
   (d) analysis of experience through inferences or perception of cause and effect;
   (e) speculation and the presentation of possibilities about what could be.

After each transcript had been described in detail, a summary of the descriptions was assembled. The summary combined information from each of the groups according to grade level and context. Under each heading there is information about the conversations of each grade in each context. Observations of similarities and differences between grades and between contexts are also included. The summary is found in Chpter IV.

Interrelationships Among the Analyses

The types of analyses used in this study were selected to provide information which could be co-ordinated to give a useful description of some features of language used by the adolescents participating in the study. The analysis of syntax not only gave an assessment of the composition of syntactic structures, but also identified the T-units which were then classified according to function. The analysis of functions provided information in numerical terms about the ways language was used. In the analysis of the progression of the discourse, the uses of language were described from a holistic perspective, which could be compared to the numerical data provided by the analysis of functions. The analysis of breadth of vocabulary is not directly related to the other types of analyses, but it gives information about the diversity of word choice which supplements the information on vocabulary given in the progression of the discourse. When combined, the four types of analyses give a wider view of the similarities and differences between Grade VIII and Grade XI and between the students-alone and the students-with-teacher contexts than if each were considered separately.

CHAPTER IV

RESULTS OF THE STUDY

Introduction

For this study the researcher obtained samples of adolescent talk tape-recorded in three-person, single-sex groups during regular school classes. Four-minute samples from tapes of students talking alone and four-minute samples from tapes of students talking with a teacher were transcribed. Eight groups from Grade VIII and eight groups from Grade XI participated in the study. A teacher from the school, but not at the time teaching the involved students, joined each group for fifteen minutes. The study focused on the following questions:

1. Does peer-group talk differ from talk when a teacher is present?
2. Are there differences between the talk of students in Grade VIII and those in Grade XI when they are in a peer-group?
3. Are there differences between the talk of students in Grade VIII and those in Grade XI when a teacher is present?

Four types of analysis were designed to investigate the following aspects of adolescent talk:

1. the composition of the syntactic structures;
2. the breadth of vocabulary (type-token ratio);
3. the distribution of the types of functions for which speakers used the T-units in their speech;
4. some features of the talk which are revealed in the progression of the discourse.

Analysis of Syntax

Syntactic Measures

The T-unit (one main clause with all the subordinate clauses or structures attached to it) has been used extensively to measure written language. Ordinary prose is usually composed of regularly formed T-units. However, spoken language is much less regularly formed, so the T-unit is only one of the types of units which are found in spoken discourse. In the present study, the transcripts were divided into syntactic units as follows:

a. T-units;

b. partials;

c. incomplete partials;

d. edits;

e. holds;

f. tangles;

g. non-lexical sounds.

A complete definition of each of these terms is given in Chapter III.

Number of Each Type of Syntactic Unit

The mean number of syntactic units per group at each grade and in each context is given in Table 1. This is useful for comparing the numbers of units in each category in the students-alone context. However, it is difficult to compare the numbers of syntactic unitsfrom one context to another because the participation of the teachrs reduced the extent of student participation. Thus, the number of unis in each category was converted to a percentage of the total unitsfor each grade in each context. The percentage of syntactic units in eah category is

Table 1

Mean Number of Syntactic Units per Group

	Grade VIII Alone	Grade VIII-with-Teacher	Grade XI Alone	Grade XI-with-Teacher
T-units	57.88	37.38	66.00	30.13
Partials	42.88	39.38	39.75	25.50
Incomplete Partials	5.13	6.00	6.75	5.00
Edits	10.38	10.00	12.13	6.88
Holds	7.88	5.50	8.88	3.88
Tangles	3.75	3.50	3.13	3.00
Non-lexical	7.38	7.13	6.38	8.13

given in Table 2. The percentages are given in graphic form in Figures 1-A and 1-B.

1. Grade VIII Alone

In this context the Grade VIII students used a greater proportion of T-units than any other type of syntactic unit (45.26 percent). Partials were also numerous (33.53 percent). Incomplete partials (4.01 percent), edits (8.11 percent), holds (6.16 percent) and tangles (2.93 percent) accounted for the rest of the units spoken in this context.

2. Grade VIII-with-Teacher

When a teacher was present the students spoke a greater proportion of partials than any other type of unit (38.70 percent). There were almost as many T-units as partials (36.73 percent). The other categories

Table 2

Percentage of Syntactic Units in each Category

	Grade VIII Alone	Grade VIII-with-Teacher	Grade XI Alone	Grade XI-with-Teacher
T-units	45.26	36.73	48.31	40.50
Partials	33.53	38.70	29.09	34.29
Incomplete Partials	4.01	5.90	4.94	6.72
Edits	8.11	9.83	8.87	9.24
Holds	6.16	5.41	6.50	5.21
Tangles	2.93	3.44	2.29	4.03

accounted for the remaining units as follows: incomplete partials, 5.90 percent; edits, 9.83 percent; holds, 5.41 percent; tangles, 3.44 percent.

3. Grade XI Alone

In this context T-units were the most common syntactic units spoken by Grade XI students (48.31 percent). Partials were used frequently (29.09 percent). The rest of the syntactic units were distributed as follows: incomplete partials, 4.94 percent; edits, 8.87 percent; holds, 6.50 percent; tangles, 2.29 percent.

4. Grade XI-with-Teacher

T-units were the most common syntactic unit spoken by Grade XI in this context (40.50 percent). The following are the percentages of units in the other categories: partials, 34.29 percent; incomplete partials, 6.72 percent; edits, 9.24 percent; holds, 5.21 percent; tangles, 4.03 percent.

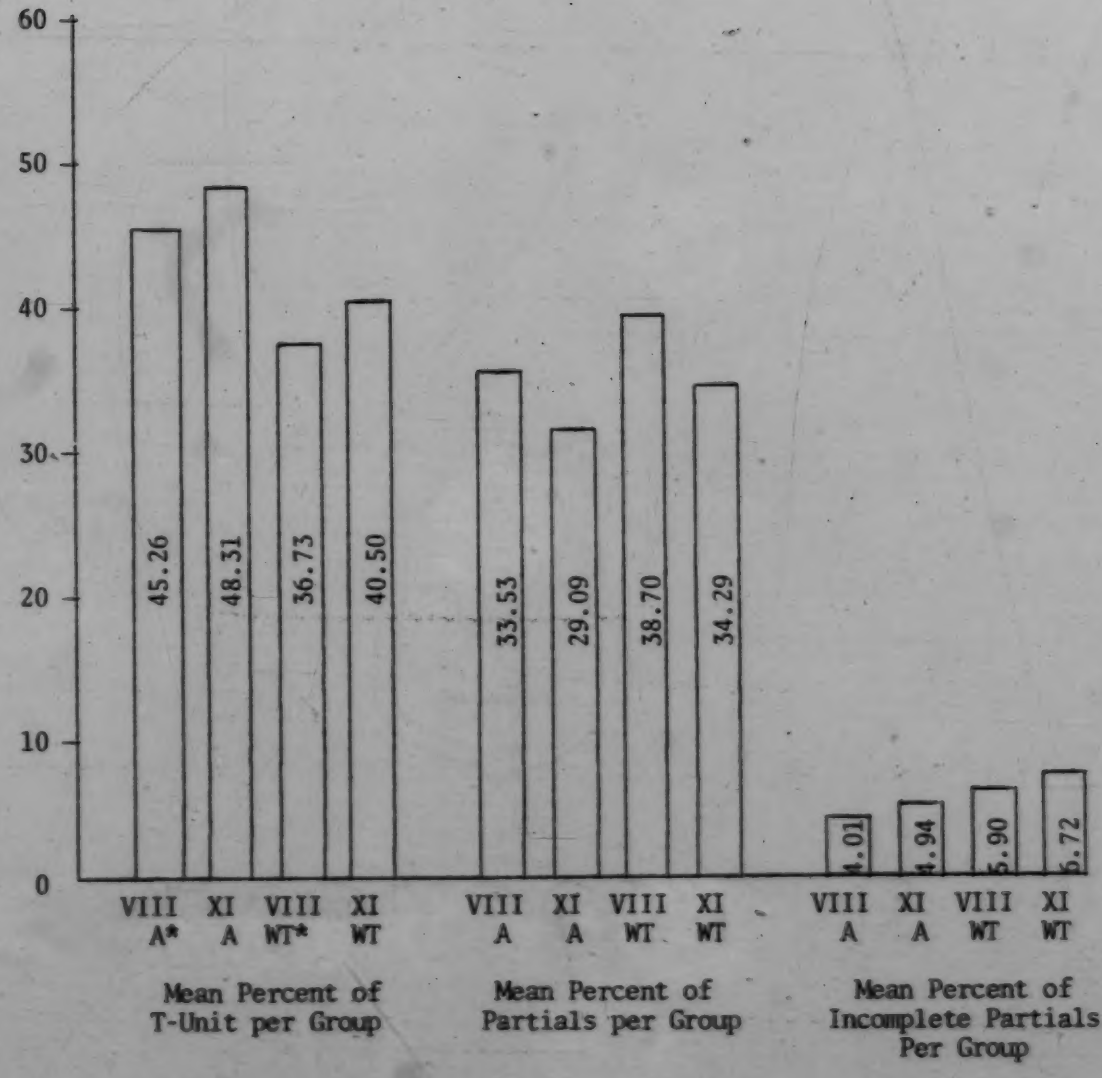


Figure 1-A

Mean Percentage of Syntactic Units Per Group

*A = alone; WT = with teacher.

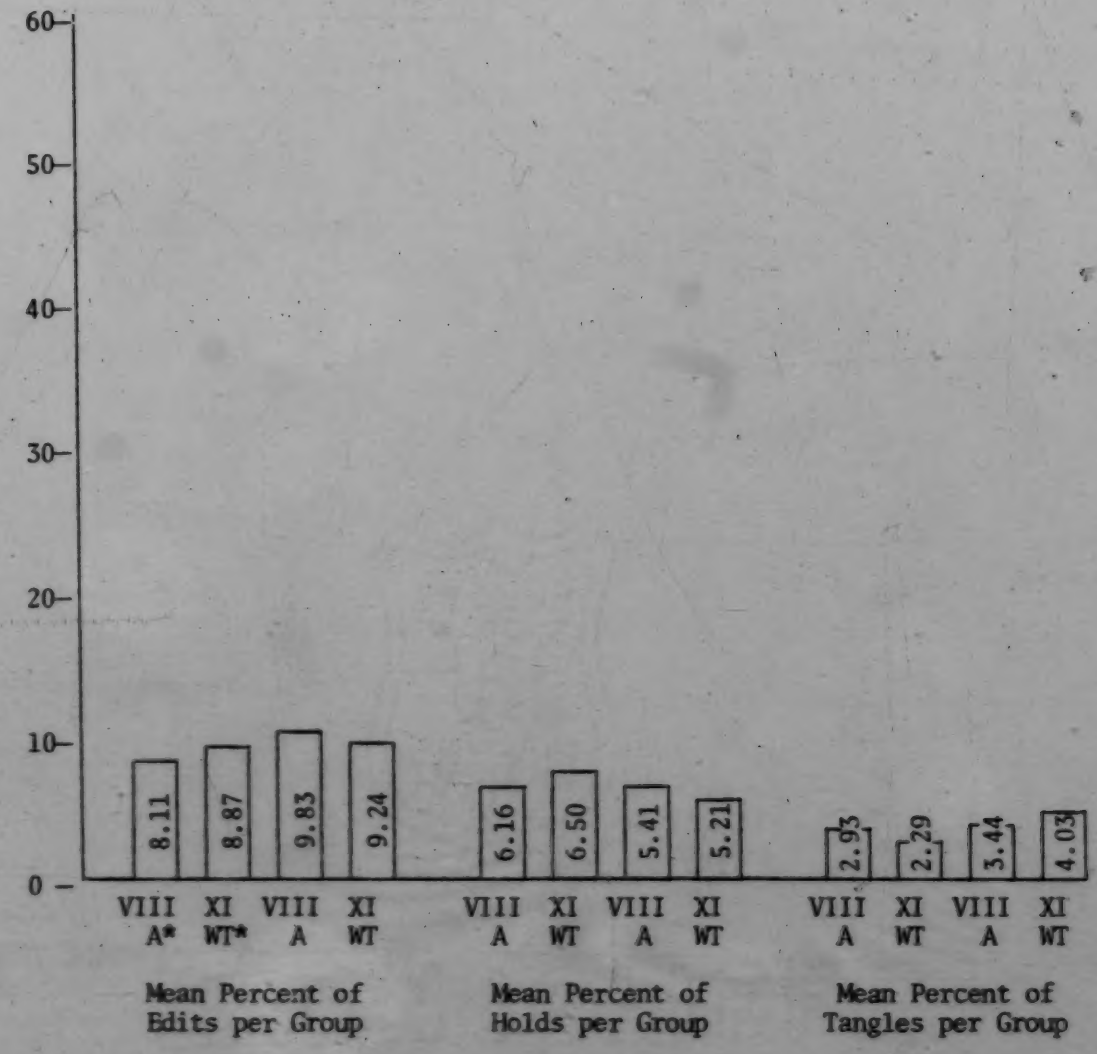


Figure 1-B

Mean Percentage of Syntactic Units per Group

*A = alone; WT = with teacher.

5. Comparison of Grades and Contexts

In both contexts Grade XI had a greater proportion of T-units in comparison to other units than did Grade VIII. Both grades spoke a greater proportion of T-units when they were alone than when they were with a teacher.

In both contexts Grade XI had a smaller proportion of partials than did Grade VIII. Both grades spoke a greater proportion of partials in the with-teacher context than in the students-alone context.

There were no extensive differences between grades or between contexts in the other categories. Both grades had a slightly smaller proportion of holds in the students-with-teacher context than the students-alone context. Both grades had a somewhat larger proportion of incomplete partials, edits and tangles in the students-with-teacher context as compared to the students-alone context.

The smaller proportion of T-units spoken by both grades in the with-teacher context as compared to the students-alone context may be related to the style of participation of the teachers. In some groups the participation of the teacher resembled the pattern found by Sinclair and Coulthard (1975) when they studied patterns of participation in whole class lessons. They described a typical exchange in the classroom as "an initiation by the teacher, followed by a response from the pupil, followed by feedback to the pupil's response, from the teacher" (1975:21). Because this pattern requires only response rather than initiation from the pupil, he is less likely to use full T-units. In addition, since pupils receive feedback, which Sinclair and Coulthard found was frequently evaluation of the response, there is reason for the pupils to try to

please the teacher. This may account for the higher percentage of edits and tangles in the with-teacher context and, as will be shown later, an increase in T-unit lengths.

Mean Length of Syntactic Units

The primary syntactic unit for conveying meaning is the T-unit. All other units are identified after the T-units have been selected out of the discourse. Hunt (1975) suggested that mean length of T-unit increases with maturity. O'Donnell (1977) proposed that mean length of T-unit is a measure of syntactic development. Some studies of T-unit length such as that of Crowhurst and Piche (1979) indicate that T-unit length is affected by mode of discourse and intended audience. Because of the importance attached to T-unit length, a two-way analysis of variance was performed in order to test the null hypothesis that there is no difference with regard to mean T-unit length between Grade VIII in both contexts compared to Grade XI in both contexts or between both grades in the alone context as compared to both grades in the with-teacher context.

As can be observed from the results of the two-way analysis of variance test given in Table 3, the difference between Grade VIII and Grade XI (contexts combined) was not significant. However, the difference between the students-alone context and the students-with-teacher context (grades combined) was significant at the 0.012 level of significance.

Analysis of Table 4, which gives the mean length of T-units by grade and context, discloses that the difference between Grade VIII-with-teacher and Grade XI-with-teacher appears to be quite substantial (1.09). The difference between Grade XI-alone and Grade XI-with-teacher is even

Table 3

Summary of a Two-way Analysis of Variance Over Grade and Context for Words per T-Unit

	Number	Mean	F-Ratio	P
Grade VIII				
Combined Contexts	8	8.03		
			0.557	0.468
Grade XI				
Combined Contexts	8	8.60		
Students-Alone				
Combined Grades	8	7.81		
			8.238	0.012
Students-with-Teacher				
Combined Grades	8	8.81		
Interaction			2.136	0.16594

Table 4

Means and Standard Deviations for Number of Words per T-Unit

Grade	Context	Mean	Standard Deviation
VIII	Students-Alone	7.77	1.47
VIII	Students-with-Teacher	8.26	2.61
XI	Students-Alone	7.84	.88
XI	Students-with-Teacher	9.35	1.38

larger (1.51). Although the analysis of variance as shown in Table 3 indicates that there is no interaction, the differences between means suggests that the differences between contexts is primarily due to the Grade XI means.

The Newman-Keuls (Winer, 1971:528-529) procedure was used (see Table 5) to test the differences between means within grades and within contexts. The results of the Newman-Keuls test showed the following:

1. The differences between means which were not significant were
   (a) the difference between Grade VIII-alone and Grade XI-alone;
   (b) the difference between Grade VIII-alone and Grade VIII-with-teacher.
2. The differences between means which were significant were
   (a) the difference between Grade XI-alone and Grade XI-with-teacher (significant at the .05 level);
   (b) the difference between Grade VIII-with-teacher and Grade XI-with-teacher (significant at the .01 level).

These results suggest that although interaction is not significant, the overall differences between the students-alone context and the students-with-teacher context appears to be primarily due to the differences in the Grade XI groups. (The F-ratio of Grade VIII-alone compared to Grade VIII-with-teacher is 0.79. The F-ratio of Grade XI-alone compared to Grade XI-with-teacher is 7.53.)

Examination of the graph (Figure 2) shows that seven of the eight groups in Grade XI had a greater mean T-unit length in the students-with-teacher context as compared to the students-alone context. Only five of the Grade VIII groups had a greater mean T-unit length in the with-teacher context. However, two Grade VIII groups had a much longer mean T-unit

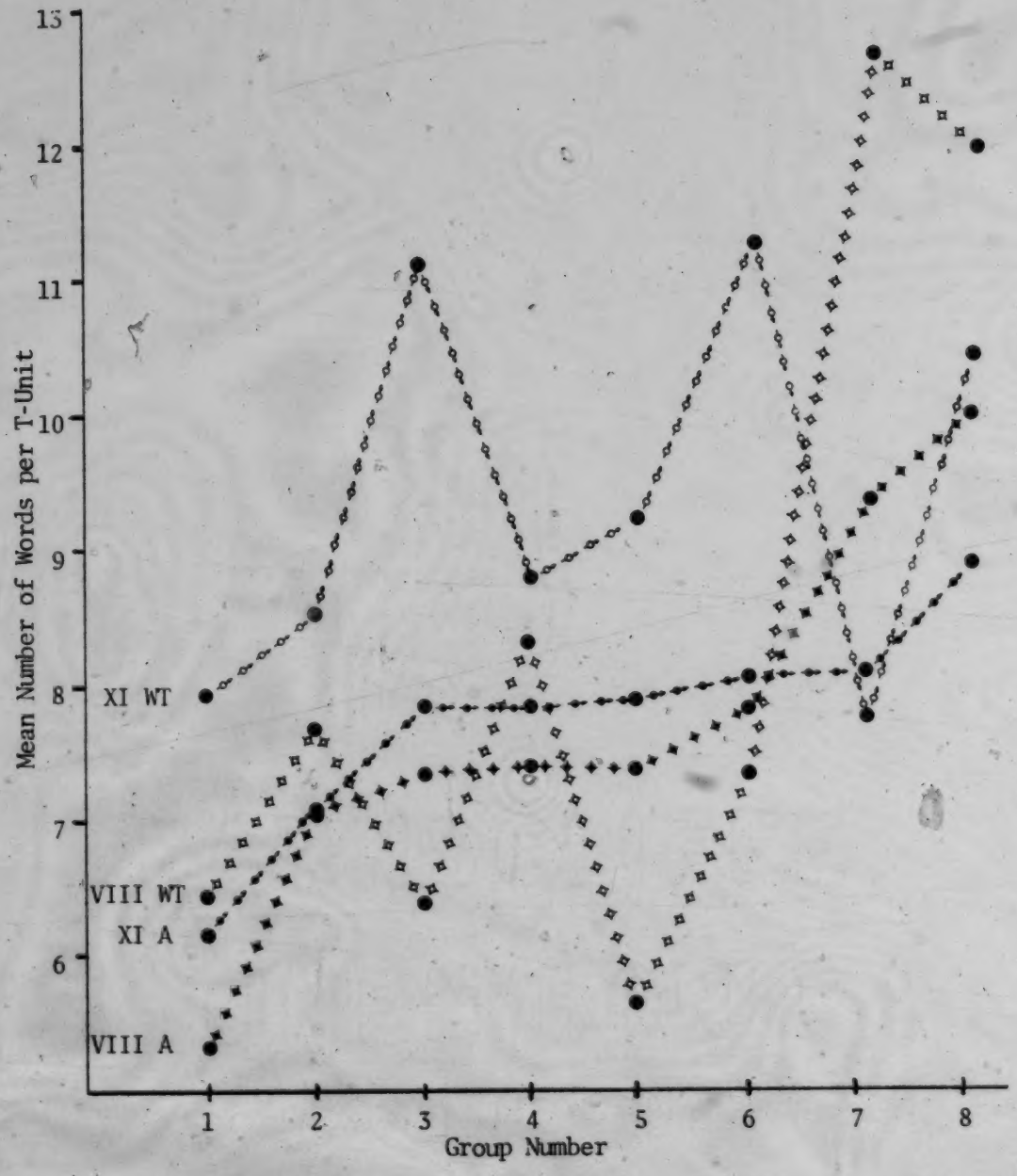


Figure 2

Mean Length of T-Units Per Group

◆ ◆ ◆ Grade VIII Alone (A)
◇ ◇ ◇ Grade VIII with Teacher (WT)
◆ ◆ ◆ Grade XI Alone (A)
◇ ◇ ◇ Grade XI with Teacher (WT)

Table 5

Comparisons of Differences in Mean T-Unit Length Between Grades and Between Contexts Using the Newman-Keuls Test of Significance

	Number	Mean	F-Ratio
Grade VIII-Alone	8	7.767	0.85
Grade XI-Alone	8	7.839	
Grade VIII-Alone	8	7.767	0.79
Grade VIII-with-Teacher	8	8.259	
Grade XI-Alone	8	7.839	7.53*
Grade XI-with-Teacher	8	9.350	
Grade VIII-with-Teacher	8	8.259	19.55**
Grade XI-with-Teacher	8	9.350	

* Significant at .05 level (F .05 = 4.60).

**Significant at .01 level (F .01 = 8.80).

length in the with-teacher context than any of the Grade XI groups. Although the overall picture suggests that Grade XI increases its length of T-units when a teacher is present more than Grade VIII, the two deviant Grade VIII groups show that differences within Grade VIII can be extensive.

The main effects of the two-way analysis of variance which shows a significant difference between the students-alone context and the students-with-teacher context is consistent with studies such as that of

Crowhurst and Piche (1979) which suggest that T-unit length is affected by mode of discourse and intended audience. A study by Jensen (1973) measured communication units which were defined so as to be similar to the T-units of this study. The subjects were children in the fifth grade. The results indicated that the children spoke significantly longer communication units when they talked with a teacher as compared to when they talked with a peer. The results of this study suggest a similar trend at the Grade VIII and Grade XI levels.

Since all other syntactic units are, in essence, what is left over after T-units are removed, the mean length of all other types of units was less than the mean length of T-units. Table 6 shows the mean length of all syntactic units for grade and context.

After T-units are removed, the most important units for conveying meaning are the partials. Many partials are one-word utterances such as "yes" or "yeah." Thus, the units are short even when there may be substantial semantic content. As shown in Table 6 and Figure 3-A, the mean length of partials for Grade VIII alone was 3.30 and for Grade XI alone 3.06, a difference of .24. In the with-teacher context the mean length for Grade VIII was 2.84 or .45 less than in the students-alone context. The mean length of Grade XI partials in the with-teacher context was 2.69. This was .37 less than for the students-alone context.

Table 6 and the graph for mean length of edits (see Figure 3-B) show that the mean length of edits in both grades was greater in the with-teacher context than in the students-alone context. At the Grade VIII level the difference in means was .15; at the Grade XI level the difference was .54.

Table 6

Mean Length of Syntactic Units

	Grade VIII Alone	Grade VIII-with-Teacher	Grade XI Alone	Grade XI-with-Teacher
T-units	7.77	8.26	7.84	9.46
Partials	3.30	3.06	2.84	2.69
Incomplete Partials	4.17	4.18	4.01	3.01
Edits	1.94	2.09	1.81	2.35
Holds	1.61	2.01	1.56	1.79
Tangles	5.84	4.56	7.06	8.55
Non-lexical	1.17	1.06	1.06	1.08

The differences in the mean length of incomplete partials and holds between grades and between contexts were not large enough to indicate important differences.

Table 6 shows that the mean length of tangles varied considerably between grades and between contexts. However, the occurrence of tangles is so erratic that it would not be appropriate to see these differences as important. At the Grade VIII level, 23 of the 58 tangles were spoken in one group. At the Grade XI level, the tangles varied greatly in length. One tangle had 13 words, another 17 words. Thus, the tendency for the mean length of tangles to be greater at the Grade XI level is mainly accounted for by one very long tangle in each context.

The results of this analysis of syntax suggest that there is a tendency for both grades to use a different syntactic style in the

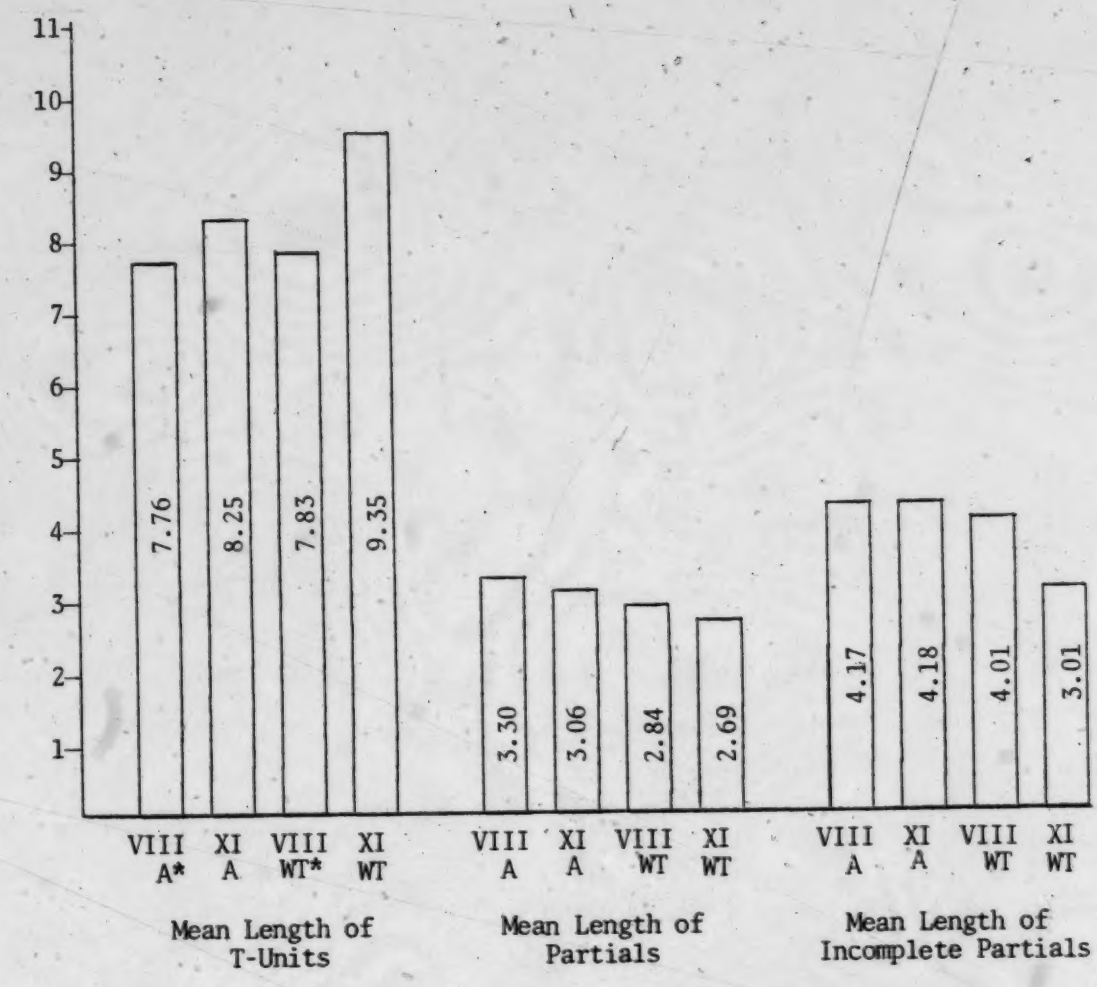


Figure 3-A

Mean Length of Syntactic Units

*A = alone; WT - with teacher.

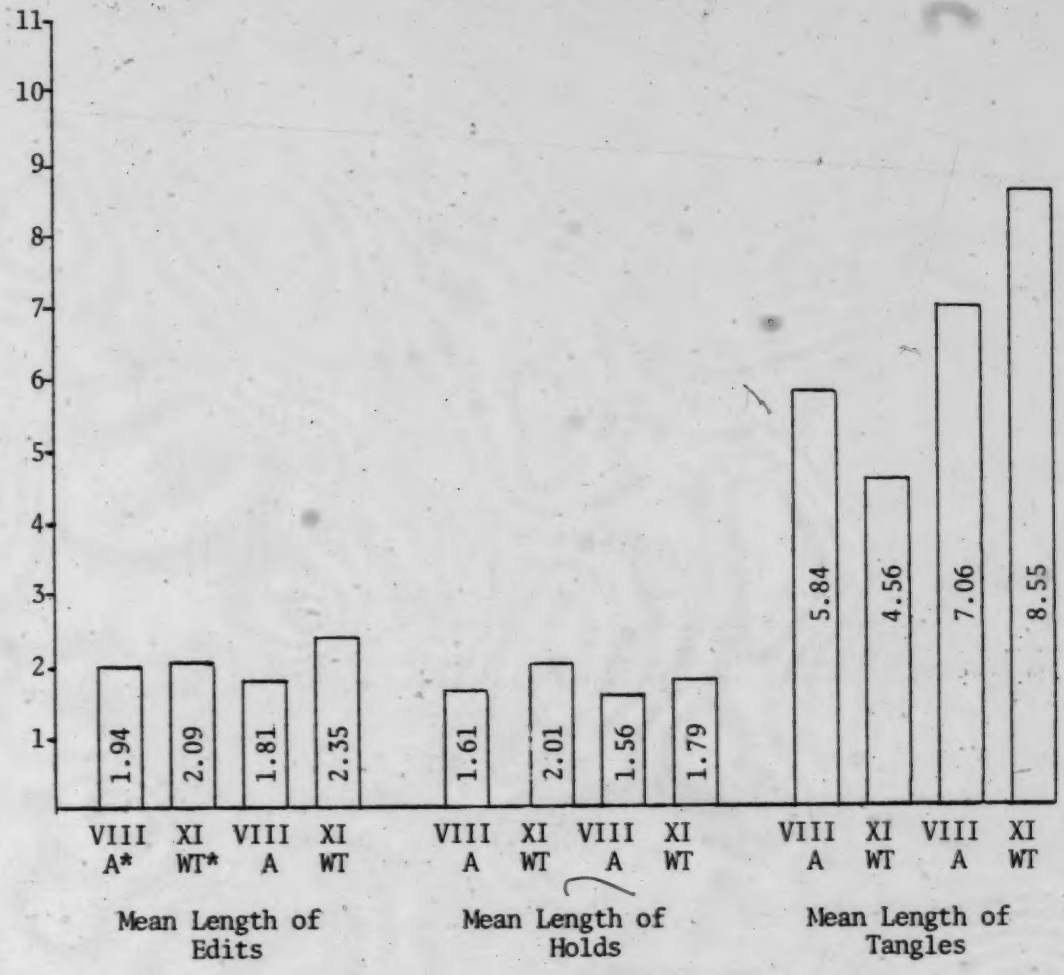


Figure 3-B

Mean Length of Syntactic Units

with-teacher context as compared to the students-alone context. The results also suggest that in some categories the syntax at the Grade XI level shows more difference between contexts than the difference between contexts at the Grade VIII level.

The Analysis of Breadth of Vocabulary

Results of the Type-token Measure

The type-token ratio is the number of different words (types) used in relation to the total number of words (tokens). Each transcript was divided into segments of 100 words each. In the first segment, a count of the number of types of words was made. In each succeeding segment, the count represents the number of types which are not used previously in the transcripts, but are used for the first time in the segment.

The results of the count as given in Table 7 show that there was almost no difference between Grade VIII and Grade XI for the five segments of 100 words. In the with-teacher context some groups produced only two 100-word segments of student speech. Thus, the comparison between contexts must be based on only two segments. The results are similar to the comparison of grades: there is almost no difference between the contexts for either grade.

Examination of the graph of the number of different types per segment for each grade and each segment (see Figure 4) illustrates that there is very little difference between grades or contexts. The pattern of the type-token ratio per segment of 100 words as shown in Figure 5 also illustrates the similarities between grades and contexts.

Comparison with Other Studies

A study by Beier, Starkweather and Miller (1967) failed to find a difference in the type-token ratio of the informal talk of boys in Grade VI as compared to the talk of boys in Grade X. Since the context

Table 7

Number of New Words per Grade and Context and Mean Number of New Words per Group for each 100-word Segment

Segment	Grade	Context	Total Words	Mean Words Per Group
First 100 words	VIII	Alone	443	55.38
	XI	Alone	448	56.00
	VIII	W.T.*	453	56.62
	XI	W.T.	454	56.75
Second 100 words	VIII	Alone	290	36.25
	XI	Alone	272	34.00
	VIII	W.T.	264	33.00
	XI	W.T.	252	31.50
Third 100 words	VIII	Alone	208	26.00
	XI	Alone	232	29.00
	VIII	W.T.	207	25.87
	XI	W.T.	Incomplete segment	
Fourth 100 words	VIII	Alone	172	21.50
	XI	Alone	151	18.88
Fifth 100 words	VIII	Alone	164	20.50
	XI	Alone	169	21.12
First and Second Combined	VIII	Alone	733	45.81
	XI	Alone	720	45.00
	VIII	W.T.	717	44.81
	XI	W.T.	706	44.12
Five Segments Combined	VIII	Alone	1277	159.62
	XI	Alone	1272	159.00

*W.T. refers to with-teacher context.

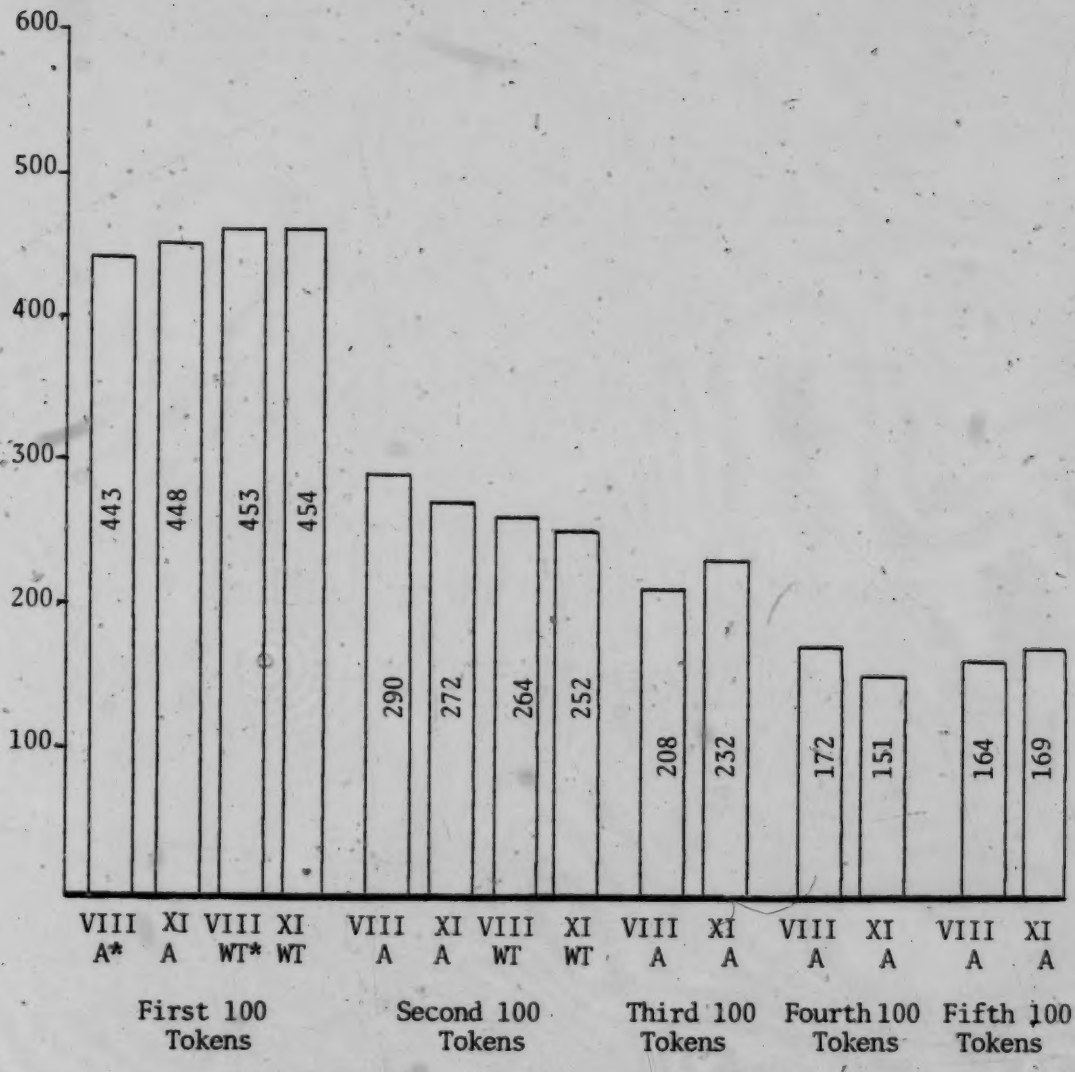


Figure 4

Number of Different Types per Segment of Tokens for All Groups Combined in Each Grade and Context

*A = alone; WT = with teacher.

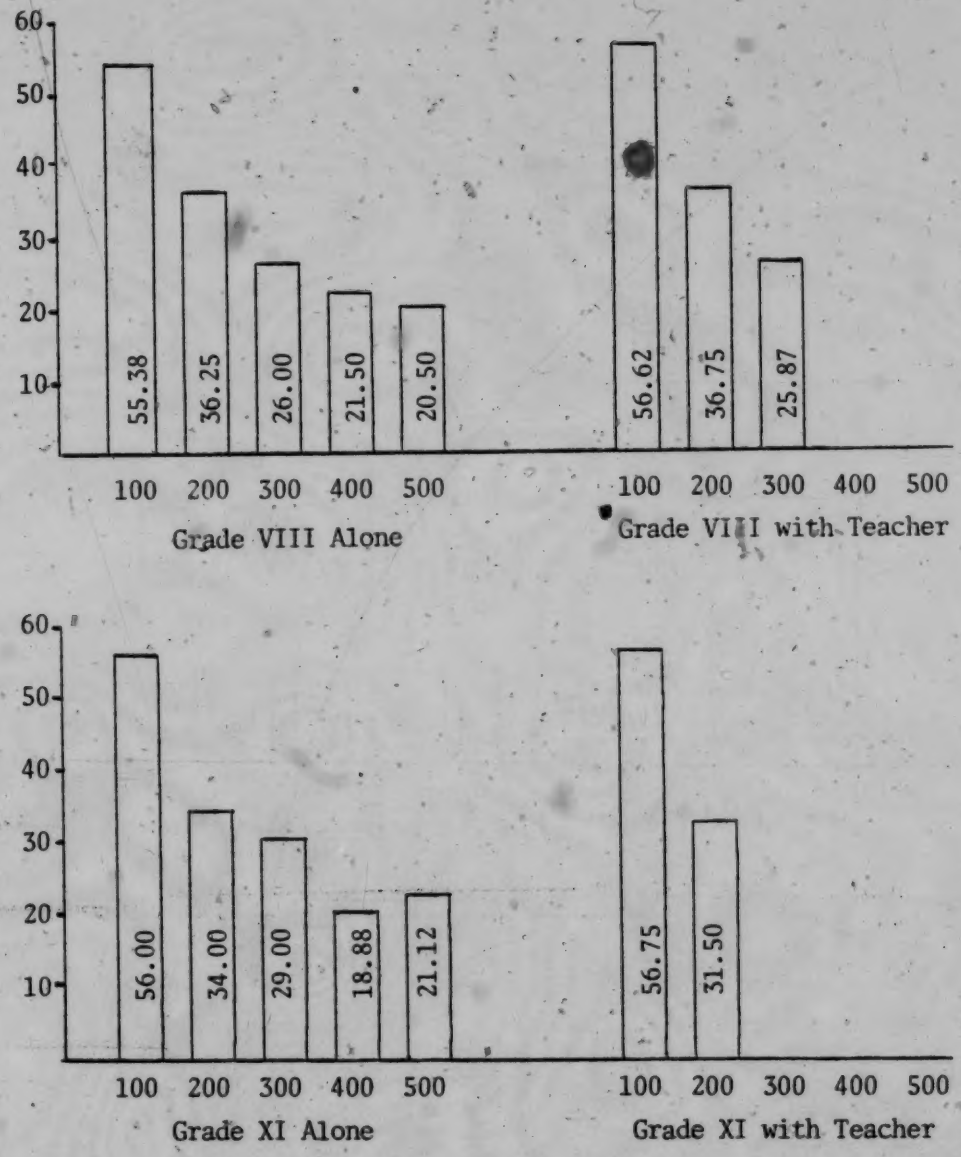


Figure 5

Mean Number of Different Types per Group for Each Segment of 100 Words in Each Grade and Context

of the language studied was informal, this could be compared to the students-alone context of this present study. The results are similar.

In a longitudinal study of 338 children in the Oakland area of California, Walter Loban used the type-token comparison for the elementary and junior high portions of the study (Loban, 1963:39-41; Loban, 1966:29-35). He taped a researcher-child interview to obtain samples of oral language. The children were divided into two groups--high ability in English communications and low ability. The average of the low and high children in Grade VIII for new words used in each 100 word segment is similar to the number produced by the Grade VIII subjects in this study.

	100	200	300	400	500
Oakland	57.60	39.50	34.00	26.50	25.00
Alberta	55.37	36.25	26.00	21.00	20.00

In the Loban study, the type-token comparison varied very little from grade to grade. However, Loban found a recognizable difference between the high ability and low ability groups at each of the intermediate and junior high grades.

The type-token comparison is designed to separate those using a widely varied choice of words from those who only use a few words repetitiously. However, there is no indication in the Loban study nor in this study that the variety of words used increases from grade to grade. Whatever changes may be taking place in vocabulary during the adolescent years, these changes do not appear to affect the number of different words used in a selected sample of informal conversation.

The Analysis of Functions

Introduction

The functions of language or the purposes for which adolescents use language were the subject of this part of the study. A system of categories was developed from systems used in other studies together with the examination of the transcripts of this study (see Chapter III). Each T-unit uttered by a student was assigned to the category which most closely defined the use made of that T-unit in the conversation. After each T-unit had been assigned to a category, the number of T-units uttered by each grade in each context was counted (see Appendix F). Because the totals of the numbers of T-units uttered in each grade and context were different, in order to make comparisons the number of T-units in each category was converted to a percentage of the total T-units uttered by that grade in that context. The percentage of T-units assigned to each category is given in Table 8.

Grade VIII Alone

The largest percentage of T-units spoken by the Grade VIII students in the students-alone context was assigned to the "Low-level Generalizations" subcategory (29.64 percent). The following categories and subcategories are ranked from highest percentage of T-units to lowest percentage:

Reporting and Recall Statements	17.75 percent
Commands	9.96 percent
Information Statements	7.79 percent
Universal Generalizations	6.93 percent
Speculation	5.84 percent

Table 8

Percentage of T-Units Assigned to Function Categories

	VIII A*	VIII W.T.*	XI A*	XI W.T.*
1. Statements for the Purpose of Operating in the Situation				
A. Statements for Management of the Context				
1. Commands	9.96	2.68	1.90	.00
2. Information statements	7.79	7.72	1.72	0.42
B. Interactional Statements				
1. Supportive responses	3.68	5.70	4.39	4.18
2. Elicitations	5.41	6.04	10.31	7.95
3. Disagreement responses	1.30	1.68	.38	.00
4. Insults	.65	.00	.00	.00
5. Threats	.87	.00	.00	.00
2. Statements for the Purpose of Organizing and Reflecting on Experience				
A. Reporting and Recall Statements				
1. References to the past	8.01	15.44	24.43	12.13
2. References to the present	9.74	5,71	14.69	6.69
B. Low-level Generalizations	29.64	41.61	27.10	44.35
C. Speculations	5.84	4.70	5.73	12.55
D. Universal Generalizations	6.93	8.05	1.91	7.96
E. Statements Alluding to Personal Feelings, Experiences or Assessments	3.03	.00	7.25	1.68
3. Statements Expressing Inventive Locution				
A. Role-playing Statements	1.95	.00	.00	.00
B. Word-play Expressions	1.73	.00	.00	.00
C. Expressions of Fantasy	3.25	.00	.19	2.09
4. Irrelevant Statements	.22	.68	.00	.00
	100.00	100.00	100.00	100.00

*A = Students-alone context; WT = Students-with-teacher context.

Elicitations	5.41 percent
Supportive Responses	3.68 percent
Expressions of Fantasy	3.25 percent
Personal Statements	3.03 percent
Role-playing Statements	1.95 percent
Word-play Expressions	1.73 percent
Disagreement Responses	1.30 percent
Threats	.87 percent
Insults	.65 percent
Irrelevant Statements	.22 percent

Examination of this ranking shows that there is a smaller proportion of T-units in the "Reporting and Recall Statements" subcategory than in "Low-level Generalizations." The tendency for these students to generalize rather than to make specific references to the past or the present is also shown by the proportion of T-units in the "Universal Generalizations" (6.93 percent) and "Speculations" (5.84 percent) subcategories.

Grade VIII-with Teacher

The "Low-level Generalizations" subcategory was assigned the highest percentage of T-units in the with-teacher context (41.61 percent). This was a much higher proportion of T-units than in any of the other categories. The following categories and subcategories are ranked according to percentage of T-units:

Reporting and Recall Statements	21.14 percent
Universal Generalizations	8.05 percent
Information Statements	7.72 percent
Elicitations	6.04 percent
Supportive Responses	5.70 percent
Speculations	4.70 percent

Commands	2.68 percent
Disagreement Responses	1.68 percent
Irrelevant Statements	.68 percent

In the with-teacher context these Grade VIII students did not have any T-units which could be classified as insults, threats, personal statements, role-playing statements, word-play expressions, or expressions of fantasy.

The tendency of these students to generalize was evident in the with-teacher context as well as the students-alone context. There was a substantial proportion of the T-units in the "Universal Generalizations" subcategory and the "Speculations" subcategory as well as in the "Low-level Generalizations" subcategory.

Grade XI Alone

The largest percentage of T-units spoken by the Grade XI students alone was assigned to the "Reporting and Recall Statements" subcategory (39.12 percent). The following categories and subcategories are ranked from highest percentage of T-units to lowest percentage:

Low-level Generalizations	27.10 percent
Elicitations	10.31 percent
Personal Statements	7.25 percent
Speculation	5.73 percent
Supportive Responses	4.39 percent
Universal Generalizations	1.91 percent
Commands	1.90 percent
Information Statements	1.72 percent
Disagreement Responses	.38 percent
Expressions of Fantasy	.19 percent

There were no insults, threats, role-playing statements, word-

play expressions or irrelevant statements among the Grade XI T-units in the alone context.

Grade XI-with Teacher

In this context Grade XI students spoke T-units which were considered "Low-level Generalizations" more than any other kind of T-unit (44.35 percent). The other categories are ranked according to the percentage of T-units as follows:

Reporting and Recall Statements	18.83 percent
Speculation	12.55 percent
Universal Generalizations	7.96 percent
Elicitations	7.95 percent
Supportive Responses	4.18 percent
Expressions of Fantasy	2.09 percent
Personal Statements	1.68 percent
Information Statements	.42 percent

In the with-teacher context there were no T-units which could be considered one of the following: commands, disagreement responses, insults, threats, role-playing statements, word-play expressions or irrelevant statements.

Comparison of Grades and Contexts

The results of this categorization show that in both contexts the Grade VIII students spoke a larger proportion of T-units which related to management of the context than did the Grade XI students. The analysis also shows that Grade VIII students spoke more of these T-units in the students-alone context than in the with-teacher context.

The conversation of the Grade VIII students differed from that of the Grade XI students with regard to elicitations. In the students-

alone context Grade XI used a higher proportion of "Elicitation" T-units than did Grade VIII. In the with-teacher context Grade XI also had a higher proportion of "Elicitation" T-units than did Grade VIII, but the difference was not as substantial in this context.

One of the most noticeable differences between Grade VIII and Grade XI occurs in the "Reporting and Recall Statements" subcategory. In the students-alone context for Grade XI, a large proportion of the T-units (39.12 percent) were assigned to this category. The proportion of Grade VIII T-units in this category was much smaller (17.75 percent). However, in the with-teacher context Grade XI used a much smaller proportion of T-units of a reporting and recall type (18.83 percent) while the Grade VIII students used a slightly higher proportion of statements of this type (21.14 percent).

The greatest similarity between Grade VIII and Grade XI occurred in the "Low-level Generalizations" subcategory. Both grades used a similar proportion of this type of T-unit in the students-alone context (Grade VIII, 29.64 percent; Grade XI, 27.10 percent). Both grades used a much higher proportion of this type of T-unit in the with-teacher context (Grade VIII, 41.61 percent; Grade XI, 44.35 percent).

Grade XI spoke a higher proportion of T-units which were assigned to the "Universal Generalizations" and "Speculations" subcategories when they were with a teacher than when they were alone. Grade VIII used a substantial number of these types of T-units, but the proportion was similar in both contexts.

The results in the "Universal Generalizations" category, especially in the students-alone context were unexpected. The defined distinctions

between the "Low-level Generalizations" subcategory and the "Universal Generalizations" subcategory were based on the distinctions between particularizing, generalizing and abstracting made by Peel (1975:177-188). In Peel's study he concluded, "There appears to be firm evidence of a significant trend by age upward in the case of abstracting (A) and generalizing (G) and downward in the case of particularizing" (1975:184).

Peel's method of using a sentence preference test seems to have produced different trends from those indicated in this analysis of spontaneous talk. In this study the Grade VIII students uttered over three times as many "Universal Generalizations" in the students-alone context (32 T-units) as the Grade XI students (10 T-units). In the with-teacher context the two grades produced a similar proportion of abstract statements.

These results should be considered in relation to the results of the "Reporting and Recall Statements" subcategory discussed previously. This subcategory is based on a premise similar to Peel's concept of particularizing. The Grade XI students in the students-alone context uttered a higher proportion of T-units of this type than Grade VIII. In the students-with-teacher context the Grade VIII students uttered a slightly higher proportion of T-units of this type than Grade XI.

There were differences between Grade VIII and Grade XI with regard to the "Statements Alluding to Personal Feelings, Experiences or Assessments" subcategory. Grade XI alone had a considerably higher proportion of T-units in this category (7.25 percent) than did Grade VIII (3.03 percent). In the students-with-teacher context there were few personal statements by either grade (Grade VIII, none; Grade XI, 1.68 percent).

The "Statements Expressing Inventive Locution" category also shows a difference between Grade VIII and Grade XI. Although the total proportion of "Role-playing Statements" (1.95 percent) and "Word-play Expressions" (1.73 percent) is not high, it is notable that this type of T-unit occurs only in the Grade VIII students-alone context. Also, Grade VIII has a higher proportion of "Expressions of Fantasy" (3.25 percent) than does Grade XI (0.19 percent) in the students-alone context. For the "Expressions of Fantasy" category in the with-teacher context it is Grade XI which has the higher proportion (2.09 percent). Grade VIII did not utter any of this type of T-unit in the with-teacher context.

T-units assigned to the "Irrelevant Statements" category were ones which had no apparent semantic connection with the rest of the conversation. They appeared to be inserted in the conversation as fillers to prevent a silence or as a way of the speaker making some contribution to the talk in order to get the attention of the others. The only T-units assigned to this category were spoken by Grade VIII students. In the students-alone context there was one irrelevant statement. There were two of these statements in the students-with-teacher context.

Comments on the Results of the Analysis of Functions

The percentage of T-units assigned to the function categories indicates that in both contexts these Grade VIII students uttered more statements for management of the situation than the Grade XI students. In the students-alone context they spoke more universal generalizations and more inventive expressions than Grade XI students. They uttered insults and threats which were not found in the Grade XI transcripts. There appeared to be little difference between grades with regard to the

proportion of the T-units assigned to te "Low-level Generalizations" subcategory. In the with-teacher context both grades increased the number of low-level generalizations they uttered.

In the students-alone context Grade XI spoke more than twice as many reporting and recall statements as Grade VIII. In the with-teacher context Grade VIII spoke a slightly higher proportion of reporting and recall statements than Grade XI.

In the students-alone context Grade XI elicited responses from other students almost twice as frequently as the students in Grade VIII. They also spoke about their personal feelings and experiences twice as frequently as Grade VIII. In the with-teacher context there was little difference between Grade VIII and Grade XI with regard to elicitations and personal statements.

This analysis indicates that there are recognizable differences between Grade VIII and Grade XI with regard to the functions for which they use language.

The Analysis of the Progression of the Discourse

Introduction

A description of the features of adolescent language which may be observed by looking at the progression of the conversation as it develops over a period of time can give information which could be useful to those who are planning school programs for adolescent learners. The transcripts of adolescent talk prepared for this study provided four continuous minutes of dialogue for each group in each context. Because much of the value of discourse may be attributed to the cumulative contributions of an individual or of several individuals building on the utterances of each other, aspects of language which could be observed as the language was progressively created were chosen for scrutiny. Attention was given to sequences of utterances as well as individual statements and their context. The following four aspects of the total group conversation were observed and described:

1. topics of conversation;
2. participation of individuals;
3. personal references;
4. language used for learning.

It is important to acknowledge that in order to describe the communicative and learning features of these conversations, the observer must interpret meanings on the basis of his own frames of reference. This is a difficulty which occurs when analyzing all types of discourse, but is more pronounced in informal, fluid, dynamic talk. The researcher must make assumptions and inferences through a process quite similar to

that used by the original participants as they moment by moment interpreted what the talk meant. The researcher has the advantage of knowing what was said later in the conversation and of being able to range back and forth throughout the transcripts to check his perceptions. Nevertheless, an outside observer must recognize the possibility that the meanings he attributes to the language may not exactly coincide with the meanings intended. The stance taken in this study is similar to that described by Barnes and Todd: "When we analyze talk, what we are trying to do is to feel our way into the meanings the participants made for the interaction as it happened" (1977:17).

As a first step in discovering how the students used language in the progression of the discourse, the transcripts were scrutinized for evidence relating to each of the four types of information selected for investigation. Using these types of information as headings, a detailed description of each transcript was composed (see Appendix G). From these descriptions of each transcript, the researcher selected evidence of similarities among the groups at each grade and in each context. Differences between grades and between contexts were also noted. The descriptions which follow are summaries of the observations made under each of the four headings.

Topics of Conversation

The directions given to the students before they tape-recorded their discussions requested that they talk about the film. As a result, many of the topics which they discussed related to the film Lifestyle (see Appendix C). Lifestyle presented a wide assortment of possibilities for conversation. It featured many different kinds of people: Margot

Kidder, a movie actress; a friend of Margot's who quit his job to live on a beach; a 100 year-old man who was pictured busily tending to customers in a hardware store; Nick Taylor, an oil executive and politician; two lawyers talking about trying to reform city government in Toronto; several poor people on the Gaspe Peninsula; a number of other persons associated with the featured people. The film also pictured many different locations: Los Angeles, interior British Columbia, an Ontario resort, Toronto, Gaspe, and Dallas.

As it presented many "lifestyles," the film referred to the problems created by some ways of living: stress from change, pollution, traffic congestion, and housing difficulties. Thus, to talk about the film, the students had to select from a wide variety of possibilities. In addition, many groups used the film as a springboard to talk about other issues. This produced another type of topic which the students chose to discuss.

Each group received a list of possibilities for discussion. The list was provided to help those groups who might have difficulty getting started talking. The instructions emphasized that the use of the list was optional. The following is the list provided:

(a) the most impressive scenes in the film;

(b) the people in the film;

(c) the photography and the sound effects;

(d) the usefulness or the uselessness of the film.

The discussion suggestions were designed to be very general and open-ended so that if students used them they would be free to select whichever specific parts of the film they wished to discuss. Most groups did not refer to the discussion suggestions during the transcribed

four minutes. Those who did refer to the suggestions were in groups which seemed to be having difficulty keeping the conversation active.

The topics which are referred to in the transcripts are arranged below in columns according to grade. The topics are grouped according to context and the type of topic.

Grade VIII	Grade XI
1. Students-alone Context	
a. Topics relating directly to the film:	
Margot Kidder	Margot Kidder
The man on the beach	The man on the beach
The 100 year-old man	The 100 year-old man
Kinds of people in the film	Kinds of people in the film
The effects of change	The effects of change
The value of the film	The organization of the film
	The age of the film
	The bias toward "old" people of the film
	Synchronization in the film
	The polluted beach
	Nick Taylor
	Nick Taylor's wife
	Nick Taylor's children
	Septic tanks and pill-boxes
	Lawyers in the film
	Traffic in Dallas

Grade VIII	Grade XI
b. Topics indirectly suggested by the film:	
Pollution	Pollution
Hand labour versus factories	Traffic in Toronto
Alternative sources of energy	Old-age
Radio and television news	Rural versus city life
The fast pace of modern society	Employment problems
False advertizing	
Inventions and inventors	
Problems of group conformity	
The need for people to try to understand each other	
c. Additional topics:	
Management of the tape-recorder	The need for each person to talk
The need for each person to talk	The Eskimo football team
Wishes for life in the future	Indians
How work interferes with freedom	Prejudices
The Waltons	Distribution of wealth among the provinces
The need for popcorn with a film	Government agencies
Personal career plans	Boyfriends
Generation or age differences	The use of alcohol
	Self-confidence
	Handling conflict
	H's grandfather
	Mr. W's character
	A trip to Florida
	A baseball coach

Grade VIII	Grade XI
2. Students-with-teacher Context	
a. Topics relating directly to the film:	
The man on the beach	The man on the beach
The 100 year-old man	Margot Kidder
Kinds of people in the film	Nick Taylor
The effects of change	Adjusting to change
The possible uses of the film	Workers in the film
The meaning of Lifestyle	Poverty in the film
The organization of the film	Bias toward "old" people shown in the film
Photography in the film	Organization of the film
	Age of the film
b. Topics suggested by the film:	
Pollution and transportation problems	Pollution
Untrustworthy politicians	Government problems
Employment and unemployment	Taxes
Technology, conservation and coal mining	Actresses and film careers
Algae	Housing
Survival and the future	Influences of television
Organizing for social action	
The difficulty of choosing wisely when voting	

Grade VIII	Grade XI
c. Additional topics:	
Personal plans for the future	Personal plans for the future
	Miss Canada Pageant
	Suicide
	City-life
	Money-management

The most common type of topic at each grade level and in each context related to people in the film. Margot Kidder, her friend on the beach, and the 100 year-old man were talked about most frequently. The second most common type of topic referred to social problems. Most of these topics had some relationship to the film, but the students chose to expand the scope of the problems to include their own ideas. They frequently referred to their personal experiences as well as to things they recalled from television, radio or films. Five transcripts in Grade VIII and six in Grade XI contained references to pollution.

The number of topics identified varies from Grade VIII to Grade XI and from students-alone to students-with-teacher contexts. When the students were alone, Grade XI talked about 34 different topics while Grade VIII talked about 23. The difference may be partly due to the tendency of Grade XI (as shown in the function analysis) to refer more frequently to specific people, places and events. Secondly, the Grade VIII tendency to do imitations and word play (as also shown in the function analysis) meant that they had less time to discuss topics.

When the students were with teachers they talked about fewer different topics than when they were alone. The Grade XI decrease from

34 topics when alone to 15 topics when with a teacher was greater than the Grade VIII decrease from 23 when alone to 18 when they were with a teacher. When the teacher was present, the most noticeable reduction in number of topics came in the "additional topics" category. When alone, Grade VIII talked about eight additional topics compared to only one when a teacher was present. Grade XI dropped from 14 additional topics when alone to five when a teacher was present.

The Grade XI list of "additional topics" is different from the Grade VIII list of "additional topics" not only in number (six more) but also in type. Grade XI topics were much more closely related to personal interests, feelings and experiences. Whereas Grade VIII's tended to be playful (e.g., the need for popcorn), Grade XI's more frequently became absorbed in issues about which they had strong personal views such as racial prejudice, injustices to Indians, and use of alcohol. At the Grade VIII level there were some of these types of discussions. For example, a group of Grade VIII boys talked about how they could be good students and still have friends and an active sports and social life. On the whole, however, Grade VIII groups chose fewer of these topics than did Grade XI groups.

The larger number of topics talked about by Grade XI groups when alone indicates a wider variety of interests and concerns. In addition, the larger number of "additional topics" indicates that these Grade XI students were interested in many divergent issues which developed from their perceptions of the film.

The presence of a teacher in both Grade VIII and Grade XI groups appeared to decrease the number of topics discussed. Each topic

was sustained longer when a teacher was with a group. Sometimes this was because the teacher was the main contributor to the talk. The presence of the teacher also reduced the number of "additional topics" discussed in groups at both grade levels.

The topics chosen by these adolescents give evidence to support a comment by Britton (1970) that for adolescents, people are an area of exploration in their talk. To the world of people they add the world of ideas. In the topics chosen by both Grade VIII and Grade XI there is also support for Britton's interpretation of Piaget's discoveries about adolescent thinking:

> We can still recognize as familiar the tendency he found for adolescents to indulge in broad theories about a man's place in society, about man's place in the universe--about politics and religion and science and philosophy. (Britton, 1970:231)

Participation of Individuals

Questions about the participation of individuals or the lack of participation of individuals arise when educators evaluate what happens in the conversation of adolescents talking in small groups. How is the participation distributed? Do some individuals dominate and others withdraw? Are utterances long and self-contained, or do the speakers interweave their statements so that meaning is produced by a combination of contributions? Some indication of how the students who were in this study participated in the small-group situation may be observed by an examination of the progression of the discourse.

All of the groups produced a continuous flow of talk for most of the four minutes. Most of the groups of students alone assumed that each person had a responsibility to talk. When a teacher was in the

group, the students rarely spoke until the teacher initiated a topic of conversation. One boy in Grade VIII asked the teacher to "Talk," apparently believing it was the teacher's responsibility to do that. In most groups, the teachers accepted the responsibility for keeping the flow of talk going and tried to promote student responses by a series of questions.

The students in Grade VIII made more comments about the need to talk than those in Grade XI. However, the Grade VIII students were less likely to involve other students by asking encouraging questions. Two Grade VIII groups had difficulty sustaining the conversation because one of their members made distracting comments.

Information about the extent to which each individual participated was obtained by counting the number of words spoken by each student. In the students-with-teacher context the number of words spoken by each teacher was also counted. Table 9 gives the number of words spoken by each participant in the Grade VIII groups in each context. Table 10 gives the number of words spoken by each participant in the Grade XI groups in each context.

As shown in Table 9, the mean number of words spoken by Grade VIII students in the students-alone context was 229. In the students-with-teacher context the mean was 148. Table 10 shows that at the Grade XI level the mean number of words per person in the students-alone context was 224. In the with-teacher context it was 139.

In order to compare the extent of individual participation between grades and between contexts, the speakers were classified according to their total word count. All the participants who spoke less than 50 words were placed in the 0-49 segment. Those who spoke between 50 and 99 words

Table 9

Total Number of Words Spoken by Each Participant

Grade VIII

Group	Speaker	Speaker	Speaker	Teacher	
F20[1]	433	146	236	---	815
F20T[2]	126	189	69	299	683
F24	499	313	0	---	812
F24T	248	43	240	142	673
M28	282	146	341	---	769
M28T	285	44	106	208	643
M29	352	184	72	---	608
M29T	504	1	0	211	716
HG1	193	273	5	---	470
HG1T	197	104	33	206	540
HG2	160	203	213	---	576
HG2T	111	132	182	133	558
SM6	190	407	160	---	757
SM6T	220	205	14	145	584
LD1	263	162	260	---	685
LD1T	236	113	145	20	514

Total students-alone words--5493

Mean -- 229

Total students-with-teacher words--3547

Mean-- 148

Total teacher words--1364

Mean-- 170

[1]Students-alone context.

[2]Students-with-teacher context.

Table 10

Total Number of Words Spoken by Each Participant

Grade XI

Group	Speaker	Speaker	Speaker	Teacher	
TF1[1]	177	227	299	---	703
TF1T[2]	129	161	129	284	703
TF2	170	316	152	---	738
TF2T	72	227	38	404	741
TM5	310	235	228	---	773
TM5T	114	544	126	157	941
TM1	445	86	50	---	581
TM1T	228	5	32	496	761
SM3	206	190	264	---	660
SM3T	0	147	36	608	791
LB3	202	236	232	---	670
LB3T	173	36	170	368	747
LG1	504	38	170	---	712
LG1T	108	196	198	304	806
LG2	139	327	179	---	645
LG2T	224	99	137	430	890

Total students-alone words--5382

Mean-- 224

Total students-with-teacher words--3329

Mean-- 139

Total teacher words--3051

Mean-- 381

[1]Students-alone context.

[2]Students-with-teacher context.

were placed in the 50-99 segment. This procedure was followed for all 50-word segments up to 450. The results of this classification are presented in Table 11.

The grouping according to the number of words spoken as given in Table 11 shows that in the students-alone context the majority of the 24 students of both grades spoke between 150 and 299 words: 13 students from Grade VIII groups were in this category; 15 students from Grade XI groups were in this category. Two Grade VIII students and one Grade XI student spoke fewer than 50 words. Three Grade VIII students and two Grade XI students spoke over 400 words.

In the students-with-teacher context, the majority of the participants at both grade levels spoke fewer than 150 words: 14 Grade VIII and 15 Grade XI. In this context, only one student in each grade spoke more than 299 words. The loquacious Grade VIII student spoke 504 words; the Grade XI student 544 words.

The words per person count revealed a difference between the number of words spoken by teachers in the Grade VIII groups compared to those in the Grade XI groups. At the Grade VIII level, none of the eight teachers said more than 299 words. At the Grade XI level, six of the eight teachers spoke more than 299 words. The total of words for Grade VIII teachers was 1,364 or a mean of 170.5 words per teacher. The total of words for Grade XI teachers was 3,051 or a mean of 381.37 words per teacher.

In spite of the variation between grades for the teachers, the numbers of words per pupil was similar from grade to grade for both contexts. The following tabulations show the similarities:

Table 11

Number of Individuals in each Fifty-word Segment According to Total Words Spoken

Number of Words	VIII Alone	XI Alone	VIII with Teacher	XI with Teacher	VIII Teachers	XI Teachers
0-49	2	1	6	6	1	0
50-99	1	2	1	2	0	0
100-149	2	1	7	7	3	0
150-199	6	6	3	5	0	1
200-249	3	7	5	3	3	0
250-299	4	2	1	0	1	1
300-349	2	3	0	0	0	1
350-399	1	0	0	0	0	1
400-449	2	1	0	0	0	2
Over 450	1	1	1	1	0	2
Totals	24	24	24	24	8	8

	Students-Alone	
	VIII	XI
Low participation (0-149 words)	5	4
Moderate participation (150-299 words)	13	15
Extensive participation (300-449 words)	5	4
Unusually high participation (450-544 words)	1	1

	With-Teacher	
	VIII	XI
Low participation (0-149 words)	14	15
Moderate participation (150-299 words)	9	8
Extensive participation (300-449 words)	0	0
Unusually high participation (450-544 words)	1	1

At each grade level and in each context there were differences from group to group in the patterns of participation which developed in the dialogue. They ranged from the type of situation in which each individual spoke his utterances as if he were giving some kind of performance designed to impress the others with wit or to shock them with the unexpected, to groups where the talk flowed from one person to another with unself-conscious sharing and mutual supportiveness. In the students-with-teacher groups, the pattern of participation appeared to be mainly controlled by the teacher. The main differences from group to group in this context were differences in the style of participation of the teacher.

There is evidence in the transcripts of the Grade VIII students-alone groups to support Elkind's (1967) contention that when adolescents gather, each person is acting simultaneously as an actor in his or her

own view, while at the same time being an audience for the rest of the individuals around him. In two groups the individuals spent most of their time performing for each other (and possibly for the tape-recorder), and made very little attempt to accomplish the task of discussing the film. The following is an example:

J: All right fellahs.
P: All right, all right, all right.
J: Jolly good. Lucky thing we ain't jolly good kangarusa.
M: Would, would ya want a kangaroo for supper?
P: Ah mahn--kangaroo.
J: Shut up. Okay--most impressive scenes in the film for us were?
M: Women.
P: Back off. We don't take that kind of garbage.
J: The woman.

In the second group of this type, one of the boys tried to get the others on task, but was usually blocked by a second boy. At first, the third boy tried to cooperate with the one who wanted to keep to the prescribed task. However, he eventually was diverted to a performance style of speech. The following excerpt shows how D. tries to stay at the task, but R. distracts him.

D: Okay. Let's go on to the next question. The usefulness, the usefulness--
P: Or the uselessness of the film. Well, it was pretty useless, if you ask me, because it--
D: Well, I thought--Yeah, well it showed people who, people, uh, different view of uh--
R: Hey, let's see how long this tape's been going for, eh?
D: Of uh, of uh, I dunno, well--
P: It wasn't--
R: Uh, this Kermit the frog.
P: For myself, I feel that this was not a very good movie.

In one girls' group two participants carried on an integrated conversation, but stopped twice to try to get a third girl to speak. She refused, so they continued to talk without her. In another group, only two girls spoke. There was no apparent reason for the third girl's silence. When the teacher joined the group the third girl contributed to the discussion. In the other four Grade VIII groups alone, the participation was quite evenly distributed, although most groups had one person who participated at greater length than the others.

In the students-with-teacher context, the teachers' participation was often in the form of questions, usually related to the film. The students responded to the teachers in much the same way as they would in a large classroom situation with brief generalizations or brief references to the content of the film. In most groups each of the students took some of the responsibility for responding to the teacher. However, in one group, only one of the students interacted with the teacher.

At the Grade XI level, every student participated in the conversation in the students-alone context. All of the groups accepted the task of discussing the film, though their talk often digressed to tangential topics. Frequently, the students requested information or opinions from each other and responded sensibly to the meaning of each other's contributions.

In two groups they encountered interaction problems, but were apparently able to solve them. In the group where a controversy developed over the presence of septic tanks or pill-boxes in the film, at the moment of sharpest conflict one of the boys tried to change the subject

abruptly by saying, "We should talk about that game." The other boys ignored him for the moment, but closed off their argument quickly and amicably. Immediately, the third boy said, "That film reminded me of that football game." This started them on a new topic on which all of them could agree.

The second group had difficulty because one boy talked a great deal, but the other two seemed reluctant to speak. The talkative boy made some attempts to involve the others, but frequently interrupted them with lengthy explanations and opinions. When the tape-recorder fell over, one boy said, "Why don't we stop it?" Then the talk contined as follows:

H: Well, I don't care, I have no inhibitions about talking, but they're going to think I'm the only person in this group, so you better say something.

L: You do most of the talking, anyway.

H: Pardon me?

L: You do all the talking anyway, so you might as well keep it up.

H: Yeah, well that's not good, cause then all, all they hear is my ideas.

L: Ours are like that (not good).

H: Pardon me?

L: Mine are like that.

H: Mine are like that . . .

L: What do you think about that guy's 300-point system?

In the students-with-teacher context, the teachers usually participated much more extensively than the students. Only one teacher spoke fewer words than any of the students. The teachers asked many questions and frequently rephrased the same question until a student gave an answer which the teacher accepted. Several teachers gave quite extensive talks on their view of politics, housing or other social issues.

The Grade XI students appeared to be willing and interested listeners. They responded to the teachers with questions and brief supportive statements.

In comparing the participation of Grade VIII to Grade XI, it seemed to this observer that the Grade VIII contributions were characterized by individualistic, competitive, dramatic and sometimes disjointed tendencies. The Grade XI participation had more integrated, mutually supportive characteristics. The Grade XI students seemed more able to focus on the meaning of each other's statements and to be less distracted by the social or situational aspects of their task. They still have much to learn about participation in groups, but the students in these Grade XI groups responded to each other in a much more coherent way than did the students in Grade VIII.

In the students-with-teacher context one of the main differences between Grade VIII and Grade XI was in the extent to which the teachers participated. Grade XI teachers spoke over twice as many words as teachers who met with the Grade VIII groups. Students in Grade XI encouraged the teachers to talk and were niggard in the extent of their answers to the teachers' questions. Teachers in the Grade VIII groups asked more divergent questions than teachers in the Grade XI groups. The Grade VIII students were less inhibited in their answers than were the students in Grade XI. The result of these factors was that teachers in the Grade XI groups spoke more words than teachers in the Grade VIII groups.

Personal References

Much of the importance of speech, especially in face-to-face conversations, is for the benefit of each individual's internal organization of his own view of the world and the place of himself in it. Three aspects of the personal use made of conversation are as follows: first, the use of speech to relate new perceptions to previous personal experiences; second, the use of speech to refer to perceptions of self or personal identity; third, the use of speech to express values, or assessments of the issues raised in the conversation. The transcripts of adolescent conversation obtained for this study contain examples of each of these three ways of using language.

To obtain information on these three aspects of personal references, each transcript and each description of the transcript were surveyed. A list was made of each type of personal reference. The following commentary is based on these lists.

Personal experience. The most striking result of analysis of the Grade VIII transcripts is that there were almost no references to personal experience. This was true in both contexts. The conversation produced by these Grade VIII's did not show evidence of them relating new information to things they had previously experienced. The only reference which approached an attempt to bring past experience to bear on the issue discussed occurred in a girls' group talking alone. While discussing aircraft pollution, one girl said, "Did you see that on T.V. about those great big new jets that were made with the big nose? When they took off--the whole place was just smoke?" There were no references to personal experience in the groups with a teacher present.

In the Grade XI groups there were some references to past personal experience. However, these references occurred in only four groups. The other four groups did not contain evidence of the participants relating past experience to the issues being discussed. In the students-with-teacher context, references to personal experience occurred in only two groups.

The references to personal experience varied a great deal. One girl described how she had written letters to the Prime Minister; another told about her family's efforts to get help for a retarded sister. In a discussion of alcohol, one girl related, "A lot of times I've just gone and gotten drunk. . . and that way you weren't left out." Another girl recalled what she had learned from a radio program about blind people. One girl illustrated what she considered fun by describing an evening with friends water skiing and playing a game named "aggravation."

The boys' contributions emphasized experience more than the personal dimension. Two different boys described their experiences involving polluted lakes. Another boy recalled his experience on a crowded expressway in Toronto. In a more oblique reference to his own experiences one boy said, "You don't watch war movies do you?" He implied that he knew a lot about war tactics because he did watch these movies.

Two Grade XI groups with a teacher present included references to personal experiences. In the first group a girl said, "We centre our lives, our daily lives around T.V.--at least our family does." Later, another girl revealed her reaction to the film, "The second part--I think it got kinda confusing for me." In the second group (also girls) M. said that leaving school and "going into training" would be like her

experience of going to the city for one day. "There's a thousand people around and you can't even say 'hello' to one without them thinkin' you're a bit strange or somethin'."

Identity. Psychologists such as Erikson (1968) describe adolescence as a time when individuals become aware of themselves as separate from their families and are then forced to create their own sense of who they are--their identity. Although the formation of identity is something which goes on from birth to death, adolescence is the time of greatest disruption in the process and a time when there is greatest need for the individual to be concerned about and to make decisions about identity. Anselm Strauss (1965) observed that identity is connected with the appraisals one makes of oneself and that these appraisals are based on our perceptions of how others react to us. Informal conversation presents opportunities to work on identity formation. According to Berger and Luckmann (1966), there is a saying that men must talk about themselves until they know themselves. These transcripts show some evidence of adolescents presenting aspects of their identity.

1. Grade VIII Alone

At the Grade VIII level, the references were frequently presented in a joking, frivolous manner, with only an undercurrent of serious concern. Examples are: "Like, my lifestyle is just going to bed at night and eating." "I get headaches when I have salt. I break out in pimples." "No problem here, we're just on drugs." "Don't mind us, we're on dope." "We're just dirty-minded kids." "We're not that gross."

One of the most extended references to self occurred in a girls'

group. One girl, with encouragement from the other two, made a series of comments with regard to her plans for the future: "I do not want to get married . . . . And I don't wanta have any kids and I don't want to be tied down or nothin'. I want to live out in the country--lots of horses. And I will have a farm. I want to be free." It is interesting that she does not refer to the film or to Margot Kidder, yet the girl's description of how she wants to live is very similar to the lifestyle of Margot Kidder as shown in the film.

In the same group, the girls discussed sex roles. One girl said, "a guy goes to school until he's in Grade XII, right? Then he's finished school, you know. Probably takes a coupla months off to have a holiday or something. And when he gets a job he works for the rest of his life." In response to this another girl observed, "We're gonna be made to work too, you know." Later, the first girl said, "Like sure, when like girls, when they grow up, like, when we get older, you know, like you don't hafta work, you know what I mean, like, I mean you may hafta work to get money and that, but once you get married then--." Her sentence was finished by a second girl who said, "The guy supports ya." The third girl had the final comment, "The guy's always got to, you know. Like, they got to work really hard or they are bums."

The other personal references were more seriously presented. In a discussion of problems created by group pressure, one girl said, "Often, a lotta people that decide not to join the group . . . they'll be classed as squares." Another girl added, "You feel that you're left out and you're gonna go into a shell." In a boys' group, one boy emphasized his disapproval of living on unemployment insurance by saying,

"I myself, I want to be a doctor." A second boy said, "Same here."

2. Grade VIII with Teacher

In the students-with-teacher groups, references to personal role or circumstances are rare and are mainly in response to the teacher's pointed questions. The following is an example:

Teacher: Do you think you have a lifestyle right now that you're going to follow through for the rest of your life?

T: No.

Teacher: When are you going to get a lifestyle?

T: I dunno.

F: When you get a job or something'?

S: Yeah.

Teacher: Right now, think about what, what's gonna happen in the next ten years . . . . Each one of you explain what, what's gonna happen to you in the next ten years.

F: You can't know till it happens.

Teacher: Why?

S: For sure, we'll probably have a job.

F: Yeah.

On two occasions, students pointed out differences between themselves and others. When a teacher asked a boy's group if they thought the film could be used in a social studies class, one boy replied, "It's not my problem." In another group, one girl distinguished her opinion from another girl's opinion by asserting to the teacher, "That's what she is saying, but that's not what I'm saying."

3. Grade XI Alone

At the Grade XI level, the girls made many direct comments about themselves and their families. With regard to prejudice a girl said, "My mother's like that." The next speaker added, "My Mother tries not

to get too down on people 'cause it rubs off on me." Another group talked about their grandparents. "My great-grandpa's from the Ukraine." "My great-grandfather is one-hundred years old." "My grandad is from Ontario." In a different group one girl stated, "My sister is retarded."

The girls sometimes used topics raised in the film to do some self-analysis. "I don't think I could live like that lady did." "Needlepoint, wow! I might even look at a needlepoint." (Intonation indicated rejection of needlepoint.) Two other girls analyzed their use of alcohol. When girls in another group were contemplating whether or not a teacher would join them, one girl predicted, "We would probably just sit here (and not talk)."

Students in one group spent time discussing how they had changed. "If I think I'm doing my best and somebody puts me down for that, it doesn't bother me like it used to." "I'm not afraid to tell people what I think of what they're doing anymore, either." "I don't care as much about being accepted . . . I want to be really good friends, but I don't want to be overaccepted and that's what I wanted before." "I don't enjoy parties anymore."

Only two groups with boys alone produced references to personal identity or assessment of self. In one group H. commented, "I have no inhibitions about talking." Later on, the same boy said, "I'd like to have a job. See, I like material objects. I'd like to have things. I'd like a nice house. I'd like a nice car. I'd like a swimming pool, a boat or whatever--and, and you can't have these other things without having some sorta super-paying job and some super-paying job is only found in the city." In the same group, M. commented, "I don't want to live in the city, I'd go crazy." L. added, "I would, too."

In the second group, the only reference to personal assessment was in response to a discussion of the poverty seen in one portion of the film. R. said, "It kinda gets to me."

4. Grade XI with Teacher

In the students-with-teacher context at the Grade XI level only the girls produced any references to identity or self-assessment and only two groups were involved. In the first group, a discussion of change prompted one girl to express concern about what she was going to do when she was out of school. Another girl said she worried about that also. When the teacher asked, "Why does it scare you?" the girl replied, "Because we're not ready to face up to it because of the complex society."

In the students-with-teacher context, the other reference to personal circumstances was also in the midst of a discussion of change. H. said she thought the film showed that young people react better to change than older people. The teacher asked the girls, "Why should you feel able to take change better than your parents?" M. "We see, we see how they are and we can see how we are and that's, that's a lot of difference . . . . We're brought up with change--we're, we, we can adjust to it."

These were the only references to personal identity in the students-with-teacher context.

Personal values.

1. Grade VIII Alone

In this area of investigation the Grade VIII contributions were sometimes flippant and possibly ironical. One extreme example of this was produced in a girls' group.

W: I want to live with some real good friends, you know, then only together like, and I want to burn every school in the city (much laughter) and I want to kill (laughter). No. No. I'm just kidding--no, um, I hate school. It's a drag. It's a waste of your life. (laughter)

M: That's true

The transcript of a different girls' group contains examples of the tendency of some Grade VIII students to dramatize their sense of values rather than reason or explain. H. had attempted to get the group doing the prescribed task of talking about the film by asking the question, "What happened at the beginning of it now? What about the generations?" L. said, "The younger generation, yes." Then she imitated a pompous older lady saying, "It's changing very much. You see, in my day there's a lot of things that--"

M: (interrupting) The kids would'nt do in the old days.

L: Students do now what they sure as hell wouldn't be caught dead doing when my Mom was a kid and that's pretty far back. I mean, there was a depression then, you see, and uh, well, they just didn't do those kind of things. They sat around like uh--The Waltons and listened to the radio and Grandma would be knittin' and they wouldn't touch a cigarette and Jim Bob would be over there--

m: And John-Boy in the corner smokin' a weed.

There were some references in the Grade VIII groups to their assessments of teenage lifestyle issues. The group which portrayed the Waltons as pseudo-puritanical speculated on the "pot" that might have been growing around the Walton home. This prompted M. to say, "Booze is the only answer." In a boy's group, one member interjected, "We will raise a marijuana field." The next boy added, "The most impressive scene in this movie was--the dope scenes." In another group, one boy tried to get the others to discuss the film, but a second boy distracted him with, "Like, Private School Girls, that was a good film." Later, referring to

Lifestyle, the same boy said, "That wasn't my kind of movie." At another point he added, "It shoulda showed more undressed girls." The third boy agreed, "Yes, teenagers these days like those kind of movies."

In contrast to the frivolous tone of these groups, some groups stuck to more serious evaluation of issues. In one boy's group, K. referred to Margot Kidder's concern about pollution. "Said we might be gone in thirty years. I think she's right." However, J. replied, "Well, the thing is, people aren't supposed to be pessimistic and think about those kind of things." Later in the same group B. said, "People should slow down and take it easy." J. disagreed and referred to his own plans for future education, "I don't think I'll have any spares. . . . I'd go right through college and university. I wouldn't take my time and quit for a couple of years." Later, he said, "You can't always work. You always have to fool around and say work and then say, 'Look, I haven't been playing football with friends for a month or so,' and say, 'okay, I'm not doing any homework for now, I'm just going to quit and have a break', but you still have to remind that you have a job." B. agreed with him and added, "Like that guy on the beach that was just livin' off unemployment, I mean, that's not fair to the other people that are working. Now, that I don't agree with."

One group of girls appeared to be trying to make assessments of how the world runs, but their statements were difficult to interpret. These are examples.

E: I think people like this that are on films and stuff--you're not seeing their real insides. . . . All these ads on T.V., you know . . . I mean, that's a bunch of--you know, I mean, it's, it's not true.

L: Because they're just--they're putting on false faces . . . and they wanta get ahead and that's the same with our prime ministers.

E: I think if people would understand each other more, it wouldn't happen as much. (There is nothing in the transcripts to indicate what E. means by "it.")

Later, the conversation in the same group concerned freedom versus peer pressure.

E: Right now, you follow the leader of the gang. Everybody's in their own little cliques and you do what they do . . . . It's so fashion and fads in this world and in our society, completely, that it's not individual freedom . . . . They'll be classed as squares, you know, outcasts, and I think a lot of people will value their own individuality enough to get a group, you know, into a group like this.

2. Grade VIII with Teacher

When there was a teacher in the Grade VIII groups there did not appear to be any experimental or playful comments. Also, more comments referred to "we" or "everybody" than to "I." However, students sometimes discussed the same issues with teachers present as they did when they were alone. For example, two of the students-with-teacher groups mentioned the man on the beach. In one group a boy commented, "That's not really a good life." In another group a teacher responded to the girls' description of his life on the beach by saying, "What do you think of that?" L. said: "I dunno. I'd like to do that . . . . No work, just sit around." H. added, "As long as it (the income) goes up every month."

In a discussion which started with environmental problems raised by the film, one boy said, "How much are we gaining with all the technology? Sure, it makes it easier on us, but we're not off all that much better than they were a long time ago before they had a bunch of useless technology."

Sometimes a statement of assessment would result from a teacher's insistent questions. A teacher rephrased a question on the usefulness of

the film four times. After the first question, J. said, "No use to me," after the second, "Maybe the teachers could use it and that's about it." After two more negative answers J. finally said, "Probably fit better on family life."

3. Grade XI Alone

At the Grade XI level the statements about personal values and assessments were usually presented in a responsible, sometimes serious manner. Many of the comments were about issues which the students recalled from the film and which prompted them to express their own views. For example, in the students-alone context there were many comments about the scenes of pollution shown in the film: "I'd hate to live on that bringin' beach." "And that lake with all that algae!" "Yeah, that was sick." "What! (ironical tone) I'd like to live where there's beaches like that with big power poles in the middle." "That's crazy." "That's why the algae grows there so good. That's why there's such a mess. That's the whole idea of it." "Boy, that's bad!" "Even a person'd get sick getting smelling in all that crap and maybe the dog was just fed up, too, with it."

With reference to the politician, Nick Taylor, one boy said, "It was sorta neat that he was so rich, but he wanted it spread around." One girls' group had an extended discussion of national politics, but did not mention the film. A. started with a question, "What do you think of the way the provinces are run, Alberta being one of the richest in resources . . . . Don't you think maybe we should spread our wealth a little? Give some to the poorer provinces." K. did not agree. "They should give some to us. Share and share alike, that's my policy." They

continued discussing politics even though they held quite different opinions. A. said, "Who's the leader of the opposition party right now? Was it Clark? I think that's the neatest. Just got elected and already they're saying if Prime Minister Trudeau was rooted out of power what kind of Prime Minister he would make." K. replied to this by saying "I think Prime Minister Trudeau is about the best guy we could have in here right now." A. responded, "It could be the way my parents go about it, but I don't know. From what I've seen of him and the letters I've written to him and the replies I've gotten--." She paused and then launched into a description of the unsatisfactory replies the Prime Minister had sent to her letters about the seal hunt. Both of the other girls supported A's stand on the seal hunt. This was followed by a complaint from J. about government agencies. "The thing is, when you write letters or if you phone, you get the runaround from everybody. Oh, that's happened to me so many times. It's so infuriating."

These students made many evaluative comments about the film and parts of the film. Several expressed concern about the age of the film (four years), which gives an indication of what they consider "old." Some comments were: "I'd rather watch a more modern film." "That film brings out certain points, but it's not all that useful to us nowadays because that has all the old points in it and I think they should have some new film." "Yeah, we learned some, but it is kind of an old film, and it's not up to date." "That was boring." "I thought it was garbage."

In the students-alone context, the girls showed an awareness of issues regarding human relationships. In a discussion of family size, M. said, "I couldn't stand to see a family of nine." The other girls

agreed--"Yeah, that's a lot" and "that's too many." However, when L. said, "How can you share your love nine ways?" H. replied, "You can. It would have to be a bit difficult, but you can do it." On the topic of parties, M. said, "I don't enjoy parties anymore because everybody else is drinking and stuff and making fools of themselves . . . I don't really like drinking . . . I like to go to parties with just maybe six people or something." In the same group, they discussed what to do when you don't approve of another person's behaviour. K. said, "I'm not afraid to tell people what I think of what they're doing anymore, either." K. expanded on this idea until B. said, "But you know, K., that's sorta judging. You should tell them why that thing bothers you." In the exchange which followed, K. explained that she was concerned about behaviour "that's not accepted by anybody." She continued to defend her position and finally illustrated her point of view by recalling an incident involving two girls who had been refused transportation. What made her "mad" was someone, "Just doing something outright to hurt another person."

There is some evidence that these students talking in groups tried to influence each other's values. In the above discussion of how and when to express disapproval, K. at first indicated she would state her disapproval of anything she didn't like. After B. suggested this might be "judging," she stated she would confine her disapproval to major issues. In another group, one girl observed that the section of the film on Toronto lawyers was boring. A second girl demurred about this and referring to the lawyers said, "Well, that's a good way to bring out the problems, though. It really is, if you have something like that."

Later in the same group, M. expressed her preference for a modern film. H. countered with, "If you don't see things like that, you don't get an idea of what history was like."

A member of one of the boys' groups pointed out that in his opinion the film did not sufficiently involve youth. He also expressed this opinion when a teacher joined the group. In the boys-alone context he said, "Lifestyle should involve everyone. That means even the little kids. I don't think I've seen a little kid on the show yet. Nobody under twenty-one."

In one boy's group, two statements about education were quite negative. However, looking at them in the progression of the discourse, they appeared to be closer to word-play than to a serious statement of values. The boys had been talking about pollution when the conversation lagged a little.

L: Keep going. Think of some questions.

M: Well, that thing is supposed to remind you of something. I don't know what it reminds me of.

L: That reminds you that education isn't that much.

M: Education is a lot of pollution.

4. Grade XI with Teacher

In the students-with-teacher context these students sometimes expressed assessments about the same topics as were discussed in the students-alone context. The issue of pollution was raised frequently. This was the conversation of one group:

Teacher: How about some comments about that pollution of the lakes?

H: Oh, that was terrible.

L: That was one of the best scenes in the thing to show, though.

In another group, two boys cut in to finish a teacher's sentence about people's attitudes to pollution:

Teacher: Everybody is anti-pollution except when--

H: When you're doin' somethin'.

L: Except when they're doing it.

In a girls' group, the teacher presented a number of questions about pollution, then said, "Or do we give up and say the hell with it?" The girls' replies were as follows:

M: No.

H: Make some laws.

L: I wouldn't want to give up.

M: No.

L: You can't do anything unless the majority of the people will do it.

H: You can make laws.

In a different group, there was another exchange about how to stop pollution.

M: You have to impose laws.

H: You have to do the fines because we could be telling people not to do it, but we could be doing it ourselves. The only way to find out is by getting fined.

One girl referred to the problem of pollution in her own school. The other two girls in the group added their comments.

L. Oh, sure, you wouldn't go around the school today and have a campaign for picking up garbage.

Teacher: Do you feel the majority care?

L: No.

M: Probably they care, but they don't really want to get involved.

H: They rely on the caretakers--(with ironical tone). That's what they're paid for, eh?

Assessment of the film was another topic raised in both contexts. The following are the comments from the students-with-teacher groups.

(a) It's old. I think it's about '71.

(b) The first part was interesting, but when it got to the second part I really didn't know what was going on.

(c) Those problems they're talking about--it would take millions of years just to solve any of them.

(d) I think they should have the point of view of kids that are eighteen or seventeen or even a little bit younger.

The students-with-teacher groups also discussed employment and financial matters. Often the conversation started with reference to the finances of one of the characters in the film. Usually it was Margot Kidder, her friend on the beach, or Nick Taylor. When a teacher asked a group of boys if they could live like the man on the beach, one said, "Yeah," but a second boy said, "I dunno. If you find a job that you like and you work at it, that'd be different . . . . I think it would depend on the situation, how much pressure on you and all this." In another group, a boy answered a similar question about whether he could live on unemployment insurance by saying, "It'd be a very drastic change for us. We'd miss a lot of things and it would be very hard to do."

One boy made several statements about jobs and finances while the teacher was in his group. "I'd like to have some financial security although I also enjoy things day by day." "I've heard of cases where somebody dies and has thousands of dollars in the bank, yet they lived just like paupers--and that's terrible." He was concerned because he felt it was necessary to move to a city to get a job--"Like you get jammed into university, shot out, and you're part of the big money-making machine up there in the city."

Discussions about the topic of the film, Lifestyle, contained comments about how life is or should be lived:

(a) Take one day at a time, slowly.

(b) We really aren't in control of our own destiny, but we have to try as hard as we can.

(c) Really, how can you have freedom in today's society?

In comparing the life of her parents to her own life, one girl said, "We see how they are and we can see how we are and that's a lot of difference." Another girl said the changes people worry about are, "Sometimes in your family. Someone get's really sick or restless. A love affair."

A group of girls-with-teacher explored the values of television shows:

H: What I think we should start doing is thinking about what we're doing. Like these pagents like Miss Canada and all this. I think those are really dumb because I think if you think where you could spend that money in a more worthwhile thing, and yet people don't act. Like, I didn't enjoy watching them, but I'm sure there are lots of people that do, but--

L: Neither do I.

H: I think they're boring.

L: They are boring. The best part is the end.

Later in the same transcript, L. said, "The things you see on T.V., well, they're not very beneficial to you. In the first place, there's a few good shows like the nature shows, but they should throw a few more shows on about pollution, inflation, what's going on in the government. How many people really know how government's run?"

Comments on both grades and both contexts. A survey of the transcripts indicates a tendency for the Grade VIII groups alone to avoid statements which expose their own values directly. They present either very generalized statements such as, "You can't always work," or dramatize their point of view. At the Grade XI level there is more

evidence of relating issues to their own lives and of confidently presenting a point of view to which they have some commitment.

At the Grade VIII level the presence of a teacher eliminated role playing and dramatizations. Comments on values were frequently in response to a teacher's pointed question rather than spontaneously offered. In both contexts, Grade VIII kept a distance between their personal lives and their statements of value.

At the Grade XI level the presence of a teacher reduced the number of closely personal statements such as "I don't really like drinking." In both contexts the Grade XI students frequently related their statements to their own experience or their own circumstances.

Language for Learning

The transcripts of this study contain samples of language used to share information, to clarify information or to expand word meanings, to generalize, and to speculate on what could happen in the world. For the purpose of this study these processes have been called "language used for learning." It is assumed that learning in this context is mainly a cognitive activity. The focus is on speech which functions as a means by which the participants construct and reconstruct their inner representations of the world and how it operates.

Five types of participation in the conversation were selected for study as they occurred in the progression of the discourse:

a. introduction of information;
b. elaboration of information;
c. clarification of information;
d. analysis of experience;
e. speculation.

1. Grade VIII Alone

a. Introduction of Information

These students introduced information by recalling perceptions made of the film or perceptions gained from other sources. Usually, recall was prompted by the statements or questions of the other members of the group. The following are examples of the types of contributions made by Grade VIII students without a teacher present.

In a discussion of sex roles and the need to work, one girl interjected, "You can get a job when you're sixteen, if you hafta." With regard to the movie star, another girl offered the view, "Stage make-up can do a lot for a person's face." Also on the topic of the movie star, a boy recalled from the film, "She's doing too much. She admitted she was."

When a group discussed how to stop pollution, J. suggested, "Be like the Chinese--what they use making their pills and that. Then use some of the stuff that the people in the 18th century used that is not machines." Another boy informed his group that "Solar energy, there's no pollution hardly at all. There's no waste like exhaust from car fumes or from car gas."

Occasionally, contributions of rather doubtful accuracy were introduced and not challenged. One girl said, "Those jets go faster than light, and that's pretty fast." (Did she really mean to say "faster than sound?") Another girl stated, "When they have them smogs in the city, it just blows into another town like Tofield."

b. Language for Elaboration of Information

The following sequence illustrates one of the ways that these

adolescents added to each other's statements to enlarge the scope of a topic. After T. had questioned the appropriateness of the title Lifestyle, and had given examples to fit her definition of the term, K. added some details from the film. T. attempted to integrate this added material into her definition of lifestyle.

T: This film Lifestyles, didn't really show too many lifestyles, really. It showed that, that lady's. They showed that old man's. Just!

K: Yeah.

T: You know.

K: They showed that those news scenes. Those newscasts about riots and uh everything.

T: What?

K: That's, I guess, different news.

T: They affect lifestyles.

K: And they showed, um, wars and stuff.

In another group two boys collaborated to criticize the film and to suggest an alternative way of organizing the film.

G: Uh, the people in the film. I think there shoulda been a wider view of the people in the film. Not just--

M: Not just the rich people.

G: Yeah, and the successful people. Didn't even get no bums nor nothin' like that or have no drunks or--

C: Yeah, like us.

M: They had those bums from that one place.

G: Well, maybe they did, but--

M: Goose Bay or whatever it was. Gay Bay.

Later in the conversation M. read out a question about the way the film was organized. G. answered, "They coulda started out with the bums and then worked their way up to the really successful people."

c. Language for Clarification of Information

Grade VIII participants did not frequently encourage each other

to clarify their statements. However, there were some examples of this behaviour. In the following sequence, A. asks a crucial question, "How come?" When J. answers only "because," A. states her own reasons for a preference. J. responded by mentioning the second part of the film. She expands her statement in response to A.'s question, "What second part?"

J: I liked the second part better.

A: How come?

J: Because.

A: I think that first part, that old guy was cool. A hundred, you know and . . . .

J: Yeah.

A: He's been through everything, practically, you know, invention of the lightbulb--that was cool--invention of the lightbulb.

J: The second part is not true.

A: What second part?

J: When that lady--she said that we're gonna die, you know, when she said that in three years, we're gonna, that she, she . . . .

A: That Margot.

J: Yeah. She has nightmares that everything's gonna be--gonna suffocate and that.

A: Maybe, um.

J: But that was in Hollywood.

Grade VIII students-alone seemed to find it hard to reconcile differences in viewpoint without being somewhat combatative. This is illustrated by a group of boys talking about the man on the beach. In the first part of the exchange, R. expressed the opinion that the man's acceptance of money wasn't "fair to the other people that are working." M. responded with, "Well, he's making life worth--making his life worth it. I agree with you partly. I agree." A few moments later, R. stated his position more forcefully. M. in turn, gave a stronger statement of his point of view. Their differing positions were not resolved. Both dropped the topic when R. introduced thoughts about future careers.

The following is taken from the transcript:

R: People that are payin' taxes are payin' for him to live in his shack on the beach and walk along the beach. Everybody'd love to do that.

M: But he's not going out and not buying a big expensive car and a big expensive house.

R: Cause he can't afford it.

M: Yeah, well, geez--he lives--he likes--

R: He's eatin' isn't he?--No?

M: He likes the way he lives. That's probably the only thing he wants. He's working off unemployment for just for the food.

K: You said it's worthwhile. But he's making nothing out of his life. He's, he's gonna be a bum. Now, okay, if, like, I, myself, I wanta be a doctor and that's a profitable--

M: Same here. R. what do you want to be?

R: Garbageman.

K: Yeah, R. wants to be a sanitary engineer.

Grade VIII participants frequently attempted to clarify the meaning of words. When one girl referred to the inventor of the telephone, Alexander Graham Bell, as extraordinary, she repeated the word, then said, "And he was quite smart, and he was willing to try, and he wouldn't give up, so he made it, you know." In another group, one girl expanded on the meaning of evaporate:

A: Steam, but steam isn't as bad. Steam's the clear way.

S: It's, it's just evaporation, that's all it is.

A: It evaporates. It goes away. It goes flying away.

In a group of boys who were discussing smoke pollution, one boy supplied a precise word for another boy's idea.

K: Either that or think of something so the smoke that's coming out of the chimneys they'd have something like that to destroy it when it's coming up.

M: Yeah, a filter or something like that.

K: Yeah.

M: Yeah. That, that would be a good idea, too.

K: So it wouldn't infest so many people.

M: Yeah, right.

K. has used infest in an unusual way, but M. seems to accept this. Later in the same group, M. mentioned inflation: "Yeah, right. Money. Print more money--and inflation--too much money--that's no good either.

d. Language for Analysis of Experience

The transcripts contain samples of Grade VIII students making inferences, and reasoning through use of cause and effect patterns. In the group which discussed the use of steam power, W. pointed out, "Yeah, but you gotta have smart people to do that, you know." When the same girls continued to talk about pollution, they generated the following exchange:

P: Yeah, but lookit--if they make things--they're going to have to make airplanes that you peddle, like, you know, them guys would be swearing.

W: Like in Toronto or some place.

P: Like French flying power.

W: That, I don't think, is possible.

S: No? Why, no, why not? You'd be able to use your feet in cars.

W: That's getting sick now.

P: That would take a way too long.

S: Well, it's better than polluting this place. Lookit New York City, Greenwich Village and all that.

In a discussion of the 100 year-old man, H. made a deduction of the type which history teachers could appreciate--"But when he lived, it was now for him, too."

On the basis of an interview shown in the film, K. made two inferences about Margot Kidder: "She just wants the money. When she gets the money, she just goes."

Sometimes the speakers appeared to be trying to classify their experiences. For example, one boy talked about the type of category to which the film belonged. He knew it wasn't a comedy, but didn't succeed in finding a suitable alternative category. "It made you think, you know. It wasn't like a comedy, made you laugh, but you sat there and just, I guess you could say it was engrossed in the film." In a different group, the speaker had just the right words he needed--"Somebody who's physically handicapped or something, that's different."

The unemployment insurance topic caused two boys to make inferences. One said, "It's all coming out of the people's pockets who work." A second boy said, "They can't go on unemployment because everybody else has to pay."

The following is an example of a speaker using an inference to modify the generalization of a previous speaker:

J: [We should] cut down on those factories and all that--making more smog and all that.

K: Yeah, but I, 'yeah' well, but, we, I think we're at a point where, where we hafta have those factories. Like the fibre-glass factory up in the city, you know. If there's a demand, well, we hafta have it. And where are we going to put all the people who are employed there?

Another example of an inference used to modify is also on the topic of how to avoid pollution:

R: They should make electric stuff, electric cars an--

K: Yeah, but, you'd have to have something to generate your electricity, eh?

Speculation was also present in the casual conversation of these Grade VIII students. Pollution problems and the energy shortage caused several students to speculate as follows:

(a) "Now why couldn't they make a car that ran on water?"

(b) As a way to generate electricity, one boy suggested, "So maybe you can use, uh, the tides of the ocean or something."

(c) With regard to Margot Kidder's prediction that pollution would destroy the earth, "A lot of the things she said are true and will probably happen."

(d) With regard to prevention of pollution--"If we would have thought ahead, that would have been better."

(e) Two boys speculated together about how machines which cause pollution could be avoided:

K: There's certain--certain things should be done without machines.

R: Well, yeah, but with machinery--

K: Yeah, I know, it's quicker.

R: Yeah, it's well, it's a little bit quicker and it's more effective.

K: Yeah, but you still have to pay for the stuff that goes into the machine and becomes the machinery.

R: Yeah. Maybe if you went to college and you learned how to make the machinery, eh?

K: Yeah.

R: And then you can make it yourself. And that would take a lot of the cost out.

(f) Two girls speculated about how history might have been different.

E: Okay. If Bell wouldn't have discovered the--the phone or whatever, you know, I mean somebody else would have done that. I mean not--there's more than one smart person in the world.

L: Yeah, I know. But still, lookit, if you didn't have Bell it would have taken another 'er say--

E: Unless somebody else was trying to discover it at the same time.

L: Okay, maybe they were; but say Bell was a very extraordinary man--.

Although much of the language in these transcripts is fragmentary and unorganized, it is evident that the speakers have acquired some of the language skills necessary for sophisticated thought processes. It is also evident that the language is still in rudimentary form and needs development. The spontaneous urge to define words, the eagerness to generalize, to make inferences and to speculate which are illustrated

in these transcripts indicate that these students are practicing cognitive-linguistic skills in their informal interactions in small groups.

It should be noted that language used for learning occurred much more extensively in some groups than in others. One group of boys spent the entire four minutes arguing about the tape-recorder, ordering an intruder out of the group and engaging in word play based extensively on television. This, however, shows a different kind of linguistic capability. It leans toward the poetic. Although ribald, it has in it the seeds of literary skill. The following is a portion of the talk of this group:

B: Any more questions?
M: Yeah.
C: Yeah man, where'd you get your suit?
M:} At Brother's
C:} At Simpson's Sears
M: Hey, who cut your hair?
B: Who cut YOUR hair, man?
M: Sssh--that old broad's gonna look at us.
B: So?

Later, they noticed two teachers in the room. One had a nickname, "Weed" and the other was called "Greenwood."

M: Hey, does green wood burn?
C: Is green wood burned?
B: Greenwood smokes, man. Greenwood smokes tobacco.
C: Is green wood good dope to smoke?
B: Greenwood smokes weedeater.
C: And Weed smokes green wood.
M: Weedeater, weedeater, weedeater.

C. and B. then joined M. to chant--weedeater, weedeater, weedeater, weedeater.

A second group of boys produced little of the "language for learning" types of utterances. In this group there was conflict between a boy who tried to keep the group on the task of discussing the film and a second boy who regularly introduced distractions. The third boy gave some support to each of the others. The following is a sample of their participation:

A: Yeah, well, let's get on to the next question.

J: The photography and the sound effects.

A: Well, I thought that--

N: That chick burped a lot.

A: I thought the photography was pretty good because it, it showed from all around the world and it was pretty colorful.

N: Yeah, but them, them kids going bleh, bleh--

A: Well, I guess, even the best of films have a little bit of mistakes in them.

J: And the sound effects were normal.

N: Like Private School Girls. That was a good film.

A: Yeah, well, but--

N: Go on to the next question.

A's frustration in the group is indicated by his comment "Yeah, and the people sitting by me, they really bug me."

Most of the other groups stayed quite close to the task of discussing some aspect of the film or some issue suggested by the film. Each group generated between five and twenty statements which could be identified as "language for learning." The conversation in one boys' group was composed almost entirely of "language for learning" types of utterances. However, although the language used in these groups showed much potential for use in learning tasks, it also gave evidence of being experimental and in the early stages of development. A rather long statement by one of the girls illustrated both the potential for effective

language use and the need for refinement which is common in these transcripts--"But, I think the part that we seen, like the first part--you notice this generation gap--you notice the way people are--look--you've got all these communicating devices--everything we're doing is, you know, so advanced for us, and yet we're running into all these problems because we're trying to go ahead of our feet. You know, our brains going before our feet--before our feet before our brains. We just don't understand it."

2. Grade VIII with Teacher

In the students-with-teacher context, the number and kind of student utterances which used language for learning varied according to the style of the teachers. Some teachers talked a great deal and did not allow much pupil participation. Other teachers asked a great many short questions which elicited short, factual answers. A few teachers asked open-ended questions which encouraged the students to give more varied answers.

The two groups which had produced very few of the "language for learning" utterances when alone changed perceptibly when a teacher was present. In one group, the teacher rarely participated in the conversation, so acted in a supervisory role. While she was with the group, they struggled in a rather perfunctory manner to deal with the suggested questions. In the process, they used some "language for learning" types of expressions. They eliminated word-play, insults and distracting comments.

The second group which had produced mainly word-play, improvisations, comments about the tape recorder, insults and threats when alone,

did not initiate any talk after the teacher joined the group. Their responses were mainly brief replies to the teacher's questions. In these responses there is evidence of language capabilities which could be used for learning. With the teacher's encouragement, one boy described a family from the film as follows: "And they ate naturally. They just started eatin'. They didn't worry about no muss. Kids were a bit jumpy. They were sittin' there sorta smilin', shy, but they acted pretty normal."

The teacher and two of the students collaborated in the following description:

J: Looked like a family, yeah.

Teacher: Rather than?

K: Rather than some pasteboard character.

Even with the teacher present, one boy remained unwilling to discuss the film.

Teacher: What else do we have to talk about?

J: Uh. The way the film was organized.

K: It was organized different.

M: We didn't see the whole film, so we wouldn't know.

K: Yes, we did.

M: We did not. We just saw that first little bit in the first period and the end of that.

Teacher: I'm wondering how you thought it was organized, though.

J: Yeah M., you know M.

M: I don't know nothin' about it. I didn't, if, if we saw the whole film that mighta been different, but we only saw the end and the beginning, so, you know, that doesn't help us.

In spite of his protests, M. was the one who suggested that the reason Margot Kidder and Nick Taylor were both in the same film was to "Maybe show them how different they are." M. also gave reasons for his

assumption that Margot Kidder was poor. This revealed, however, that M. had seen this part of the film, but had missed the references to her money. M. said, "Well, she was a, no let's see. She was sitting there alone. Usually the rich people don't sit alone. They've a lotta money. They've a LOTTA money. Say about fifty grand."

The following is a summary of the uses of language for learning in the students-with-teacher context at the Grade VIII level.

a. Introduction of Information

In response to the many questions asked by teachers, the students introduced a great many statements recalling information from the film. The following are examples:

> That guy was a hundred years old.
>
> They told us all the things he did when he was young and when he was working at that hardware stuff.
>
> He got to do anything he wanted, mostly, that didn't cost money.
>
> And he lived on--the unemployment.
>
> And he liked to walk on the beach.
>
> He didn't have a job. He just sat and got money for doing nothing.
>
> Member that guy who came on and he said good change, good changes will injure you, or something like that.
>
> The first part was about a girl or something, sitting on the beach talking.

In addition to recall of perceptions of the film, the students also expressed generalizations:

> Well, well, he lived long himself. Through the invention of the lightbulb, you know. Changes didn't injure him at all. He, um, was sorta neat.
>
> There wasn't that many people in the film, really.
>
> You hafta have transportation.
>
> Everybody has problems.
>
> No matter what you're running for, it takes a lot of money.

b. Elaboration of Information

In the students-with-teacher context, the interaction was mainly between the teacher and individuals in the group, one by one. For this reason it was difficult to find examples of elaboration. However, when the teacher encouraged interaction among the students, statements of elaboration sometimes occurred. The following are examples:

Teachers: (referring to the film) Where do you think he would be fitting in?

J: Probably better on family life.

K: The way, yeah, the way you live.

In another group, a student asked a question which led to elaboration.

H: Well it seemed to me that they had an awful lot of cars. Why, why do you think they showed so much about cars?

W: That's what's mostly--

H: It's a big problem. They have so much pollution by them.

W: You don't really need them.

H: If like people have two or three cars and if the city was properly designed with subways or E.T.S. or something like that--

W: or bicycles.

H: er, well, even something like that. But, see, cars is just taking up so much space--roads and that and it's pollution--they're pollution.

Later in the same conversation, H. elaborated on T.'s reference to the dangers of sudden change by offering an unusual analogy to help to understand the problem.

W: The first part of the film was pretty good. She was talking about that girl and stress--and putting, you know, too much pressure on you. I don't think that's really true, but, thinking, well, oh well, I'll retire this year and I'll go and build a cottage this year--I'm sure that has nothing to do with it--extremely--I retire and that's it. So, I'm gonna go move somewhere else.

H: Yeah, that's the psychological, the effect of just too many things happening. It's just too much--of a change--just like--well, I, I guess you've heard of "the bends"--whenever you're down--like if you have such a big change of pressure it'll hurt you and psych--psychologically, too.

c. Clarification of Information

When teachers were with the groups most of the clarification of information was achieved by the teacher asking a question. There are only a few examples of students asking for and receiving clarification. One occurred when a teacher said, "I know when I came out of university I thought I was going to do a great deal of changing." A student asked, "Help the world, eh?" The teacher replied, "And it ends up, you know, you talk a lot more than you actually act."

In the following conversation, the teacher initiates a topic with a question. Two students take turns clarifying their point of view.

Teacher: Do you necessarily have to change your lifestyle?

M: Yeah, 'cause everything else changes, you know.

K: Get behind the times--like cars and computers and stuff like that bring changes.

M: Otherwise, if you were living when there were no cars and you lived till when they did have cars, you wouldn't have a car, you know. Don't have a telephone, you know. It'd be pretty hard, you know.

d. Analysis of Experience

Pollution, politics and the film itself were topics which caused these students to try to analyze how the world operates. Many of the analytical statements were in response to a teacher's question, but most of the responses in this category were more generalized than necessary to answer the question. In the following excerpt, C. presents an extensive answer to the teacher's question.

Teacher: When you think of it, we haven't got that much [food] to waste, do we?

C: Nope. Well, if we get more and more people we're gonna hafta--we're gonna hafta, to find just some either super ways of producing enough food an' shelter an' things, everything for all the people or it's gonna come down to survival of the fittest again.

The same speaker examined the consequences of a proposed mining project.

C: We rip up the good top soil that we should use to feed millions of people.

Teacher: We're wasting it.

C: Yeah, we, we could use soil over again, but, uh, like coal, we can only burn that once and there it comes down to money again. Like at that Dodd's project, you know. The rich people say okay we, we want that electricity and so we're gonna get coal.

Later in the conversation, C. expressed concerns about nuclear energy. "Like I said before, uh, you know, it used to be that only God or something could destroy the earth. But now that, but now that we have all that nuclear energy that it, it, we, we can destroy it--that's, that's the fear of the whole thing."

On the question of politics, one group of girls said a great deal more than the teacher. The teacher asked just enough questions to inspire the girls to make analyses of politics and public life.

E: Say the wage and price control freeze--everybody put Trudeau in then he did that. So now everybody's against him but they can't do nothin' about it until they boot him out, which will take a while.

L: Some of these guys gives false faces first and then after they get it they start fluffin' off and not doing the things that they say they're gonna do.

E. talked about money and politics, "I mean, politics, unless you got money you can't get into, so in a way, it's not a free country . . . some guy that has no money to his name, or something', can't get in politics and he can't do somethin' unless a lot of people back him up to raise the money, which is very doubtful."

In a boy's group, one student volunteered a statement about the main idea of the film--"Yeah, what are we, what are we doing to ourselves, that's mostly what the film was about." The same boy had the final word in this group's discussion about cars and pollution, "So, all because of Henry Ford, we're stuck with the problem."

e. Language Used for Speculation

In the transcripts of the students-with-teacher groups, there were no inventive-speculative statements of the type found in the students-alone groups. A few statements of inference might be considered basically speculative. For example, H. described people who don't make any more money than those who receive unemployment insurance, then said, "Maybe they have a better conscience than the people who just make it on unemployment."

C.'s comment, "If the city was properly designed with subways, or E.T.S." indicates that he is speculating about how a better planned city could reduce pollution.

A statement by L. about why people who are wealthy run for political office could be interpreted as speculation by her about other people's motives. She said, "Especially big politics like that . . . it makes them be in a higher bracket sorta like in society and stuff. And they probably do that just for their own personal effect sorta, like, cause if they did get in President, if they're down in the States, or Prime Minister up here, whatever, then they'd get a lot of things so they're more willing to chance it."

3. Grade XI Alone

a. Introduction of Information

These students talking in groups of three spontaneously introduced a great deal of information both from the film and from their experiences in the world. Some of this information was detailed and precise; some was of a very general nature.

Good examples of precise detail can be found in the discussions of the 100 year-old man. When one girl said, "He was in good shape, you know," a second said, "Except he was shakin' though." The third girl said, "He was from the Ukraine?" and the answer was "Yeah." A boy in another group observed, "I think that 100 year-old man was pretty handy." A second boy added, "He may have been if he was from part of the Ukraine." In a different group the boys discussed details about the man and corrected each other's slight inaccuracies as follows:

M: Then that guy, a 100 years-old, you know. He was working in a hardware store.

H: Yeah.

M: He couldn't speak or write.

H: He, he spoke, a bit, but--

L: Or write or read.

M: Write or read, yeah.

L: And he said, "Should we give him a bag?" He said, "Yeah, give him a bag. Don't charge him for it."

M: No, he said, "No charge for the bag."

One boy introduced information which he recalled during talk about the old man. "I've read that certain parts of the Ukraine, there, folks grow to a very old age. They live to be a hundred."

Other aspects of the film were recalled in detail. The following are examples:

The sound, it was kinda blurred at first.

She was saying that she wanted to be free and she hated everything. Like, she hated the smog and she liked to globe around and be free.

They sold the land and he had to part--and had to pay for it too. He has to pay eight dollars a month for that lot.

Their hair was pretty short.

We saw she was doing needlepoint.

Those kids, though, nine of them. Two boys and seven girls.

And that beach with all those power lines.

These students recalled many specific bits of information from experiences other than the film. During a discussion of pollution by algae, two boys shared experiences of having visited similarly polluted lakes. "We were at Cross Lake . . . it was just about as bad as that--green." "There's a lake up in by Peace River. It's got green crud laying on the top--just slime."

In another group they exchanged information about the Edmonton Oilers. "Did you hear that Hunter's resigning off the Oilers? He's just gonna be owner. He's got a bunch of new money. He's part owner, but he's not going to be trainer or manager or anything like that."

Some of the details contributed to the conversation were directly connected with their personal lives. "I have a retarded sister and she's entitled to a grant from the government for a couple of hundred dollars a month." "On Friday we played 'Aggravation' for I don't know how long." With regard to her boyfriend a girl said, "We drive around. Sometimes we'll sit and we'll talk for hours, just hours."

b. Elaboration of Information

These students frequently added to each other's descriptions and comments. The following is an example of a group of boys adding to each other's recall of the film:

H: That part when they were opening--when they were in that town up north, there.

M: Oh, yeah. What were--what do you call it? North Bay or something?

L: And that lake with all that algae.

M: And that beach with those power lines. Geez.

H: Well, did you see those guys were all in bathing suits and then, and there was clouds all over the place.

M: Yeah, smog.

L: Yeah, smog. You couldn't--the sun couldn't shine on you or nothin'. Sun tan from that.

M: Smog tan.

H: And they had that--when they were at that lake that was all polluted with crud and stuff. They said, ugh, "Father and son playing in the water."

M: Well, that's the one about the algae.

In another sequence, three boys added successivly to a description of a dog shown in the film.

L: He was sick.

M: He was sick, you know, and hungry looking.

L: Yeah, he was sick. He was probably starving too.

H: Yeah. Or, you know, just sick of living in that territory.

L: And he was probably lookin' for a place to hide or die or something.

M: Looked like he was kinda sick the way he was walking.

L: Go and crawl back into a hole.

c. Clarification of Information

In these transcripts, clarification occurred through questions the students asked each other and also through amendments offered to a previous speaker's contribution.

Sometimes a speaker would ask the other group members to verify a perception. For example, H. said, "What were those two guys at the beginning? Were they aldermen?" M. replied, "They were aldermen, I think. Yeah."

In the following sample, H. questions the others about a part of the film he didn't understand.

H: One thing I didn't understand there was that thing about Dallas. They had,--what was with that?

L: Oh, well, it was that they had an old downtown, right? And they cleared it all out and they bulldozed it and then they put a section downtown that was strictly just big office buildings.

H: No cars?

L: Well, yeah, but on a holiday, nobody there. Cause nobody works and so there's just nobody.

H: Oh, there's no stores or nothin', just business offices.

L: Right.

Perhaps the most unusual example of clarification through conversation occurred as a group of boys started to talk about a polluted lake. L. said, "I liked those pillboxes." The other two boys were puzzled. When they said they didn't know what a pillbox was, L. said, "You don't watch war movies, do you? . . . it's a thing made out of cement." This produced a great burst of laughter from the other boys as they realized L. had mistaken septic tanks for pillboxes. L. argued that they were pillboxes until finally he said, "I, I thought I heard pillbox. They looked like them." At the end of the discussion, when L. finally began to believe they were really septic tanks, he said, "Hey, they don't have them right on the beach, in the open?" M. replied, "Yes, they do. That's why the algae grow there so good. That's why there's such a mess. That's the whole idea of it."

d. Analysis of Experience

The Grade XI students produced many examples of language used to analyze how the world works. Inferences and attempts to figure out cause-and-effect were frequent.

Students made many inferences about the film. For example, one student calculated the age of the film as follows: "This film was old, though, because remember he said, 'What about next year's government in '72?' And it's '76 now."

Almost one-half of the transcript for a boy's group dealt with analyses of the techniques which could have been used for making the film. L. asked the question, "Was it them [the lawyers] or was it just somebody narrating it?" M. replied, "Well, I could see a mouth moving once in a while, but then it wasn't in time or anything." After this, L. inferred the answer to his question--"So you wouldn't think it was anybody talking." H. made an inference about how they were able to show Margot Kidder driving in her car, alone, and yet talking to the viewers. "That guy asked her that question? And she was driving the car--he was on the hood of the car with the camera." M. agreed, but added his own inference: "That could have been, yeah, or else it was a car right in front of her or something."

The transcripts also contain analyses of the people and situations in the film. One boy made an inference about the lawyers in Toronto who ran for office in the city council. They were elected as aldermen. L. observed, "They gave up their money. You know, they could have better jobs." In the midst of a conversation about a trip taken by Nick Taylor and his wife, a girl suggested, "They must go for a lot of vacations." When talking about how difficult it would be to care for nine children,

another girl said, "I suppose if you have that many, you would get to know them."

There is evidence these students were also trying to analyze the world beyond themselves and the film. One girl made some statements of inference with regard to native people and racial problems: "And with Indians, too, you know. It's one thing to put them on reserves and say manage for yourselves, you know,--you can't just put someone some place and say, 'go ahead.'" Later she said, "Usually, when one person of one race does something, then people start thinking that the whole race is like that."

Some of the generalizations made by the students might be considered overstated inferences. In one group, the speakers recalled Margot Kidder's desire for freedom and to live where there was no pollution. Then H. said, "If you want to have a house out in the woods somewhere, you have to work in the city first, so you can afford it. So you trade things. You trade maybe your house for ten years out in the bush or whatever." M. added, "And it's all polluted out there, anyway."

There were several examples of these student's concern for the meaning of words. One boy referred to the title of the film, Lifestyle, and pointed out, "But the title Lifestyles should involve everyone. That means even the little kids . . . . If you're doin' lifestyles, that covers everybody."

The boys who argued over pillboxes and septic tanks used definitions in their argument: "Didn't you see the holes in them? Guys in the war had machine guns in there and they go in there to protect themselves. They shoot them for the ships come in. Them are pillboxes." With regard to septic tanks H. said, "With the acid, you know." M. added

"Yeah, you know where your sewage goes? Well!"

In another group, a speaker emphasized the size and type of a house by giving it a name--"Like, it was hard to believe when that family was living in that house with uh, two rooms, that shack."

e. Language Used for Speculation

The speculation in these transcripts was mainly borderline inference-speculation. These groups of Grade XI students did not speculate about inventions or processes which could solve the problems of the world. Very often their speculations were related to specific people or specific situations. H. said about a hockey team, "They might fold." Another boy said that if you went swimming in a polluted lake, you would, "Probably get lost underneath the crud." The boys who elaborated on the condition of a dog which they had seen in the film did some speculation. "He was probably starving, too." "He was probably lookin' for a place to hide or die."

In reference to the 100 year-old man, one boy said, "Just imagine seeing all those things if you're 100 years old." A girl said, "If that man was 100 years old in '72, that makes him 104 now. I wonder if he's still alive?"

One group speculated on the relationships in a family shown in the film. When L. questioned whether anyone could really cope with "all your kids' problems if you have nine kids," H. said, "some might--I suppose a passtime, or something like this." With regard to the father of the nine children, M. said, "I wonder if he did anything with his family . . . . He thinks he's doing okay, but I don't know how good he's getting along."

The most unusual speculative statement in the Grade XI-alone transcripts ended with a very pragmatic request--"We could say strange, weird things that contradict all the rational laws of the world and try to find some application of them, but it wouldn't work, so you just talk about what you feel about life."

4. Grade XI with Teacher

In each of the groups at the Grade XI level, the teacher directed the conversation through questions and through contributions of information, some of which were extensive. In response to the teachers' questions and information, the students used language which demonstrated control of the forms necessary for learning about the world and for processing new information.

a. Introduction of Information

In these transcripts most of the information was introduced by the teachers. Since most of their questions called for generalizations rather than specific recall, there were more statements of generalizations than statements about recalled information. Also, recalled information was usually linked to an opinion or an inference of some type. For example, two boys introduced the following information to prove to the teacher that the producers of the film Lifestyle had discriminated against people under twenty-one years of age:

M: I haven't seen anything about anybody that is under twenty-one. The youngest they had was that actress that was twenty-one years old. And they just went from twenty-one and over and what they thought and that. They didn't have anybody else thinkin' of it and that.

L: Yeah. They never had any of the younger, under . . . seventeen.

When the teacher asked L. and M.'s group about the actress, all three boys contributed information as follows:

M: She was outdoor-going . . . . She wanted to be an actress, then she quit for a year.

H: She didn't want to work.

L: (referring to the man on the beach) She envied him.

In a discussion of money and politics, K. said, "He keeps saying you can make it if you try." Later, W. pointed out, "He's a millionaire," in order to emphasize that Nick Taylor could participate in politics because he was wealthy.

The Grade XI students in these groups rarely referred to anything which was not on the film. On one occasion a girl said, "Her Grandpa walked all the way from the Ukraine." The teacher said, "Oh," and followed that with a question about the film.

b. Elaboration of Information

The teachers' control of the groups did not encourage the students to elaborate on each other's ideas. However, teacher and students occasionally collaborated to expand on a reference to the film. The following is an example:

Teacher: But what did they have in the house?

M: They had T.V.

Teacher: They had T.V. They had bare floors.

M: Yeah, with the cracks and that old stove.

Teacher: The wooden chairs and the old stove.

M: That poor little boy, you know.

H: Yeah.

Sometimes the teacher's efforts to promote elaboration were not entirely successful. The following is an example:

Teacher: What do you think they're faced with?
M: Probably unemployment.
Teacher: Wealthy?
M: Poverty.
H: Yeah, poverty.
Teacher: Welfare?
L: Yeah.
M: Boredom.
Teacher: Boredom, no friends?
L: Yeah.
M: That's right, yeah.
Teacher: How about some comments on that pollution of the lakes?

c. Clarification of Information

Most of the clarification of information occurred as a result of the students asking the teacher questions of the following type:

> But that's not what the Liberal party is going for, is it?
>
> What is your ambition for next year, if you don't mind me asking?
>
> So your eventual hope, like all of us, is material objects and nothing more?
>
> Didn't you worry in the last two weeks of high school?

On one occasion a student checked the meaning of a previous speaker's comment as follows:

G: Peter Lougheed is in big business.
W: P.W.A.?
G: Yeah.

d. Analysis of Experience

Frequently a teacher's questions would elicit a response which required some kind of reasoning such as the use of inference or cause and effect deductions. In the following example, the teacher's question caused a boy to defend an inference he had made:

M: Well, he like he said, he wanted to try and help the people and try, you know, give the lower class a bit of help.

Teacher; Do you believe that? When he owns six oil companies?

M: Either that or it could just be a political thing to get elected. But I can't really believe that, because they don't get paid that much and he doesn't need the status or anything.

Teacher: Good point.

Other examples of these types of answers to the teacher's questions are as follows:

(a) Re renting versus buying a house: "But look at all the money you put out and in the end you haven't got anything." "You put all that money towards the down payment--payments every month and in the end you would have your house. Course then you'd have to live there all the time." "Then you'd have the problem of selling it, too."

(b) Re the students' plans for the future: "We'll all become actresses." "Yeah, then you'll get lots of money and you'll only have to work four months of the year and then you can go travelling for the rest of the time."

(c) Re the teacher's question asking if the boys could live like the man on the beach: "Depends how he grew up in his life, you know. He coulda been sorta outdoor going since he was really young . . . but if someone our age, like, you know, we go out once in a while and ours would be kinda hard to change, sorta like that right away, unless we went out there everyday." "He must have brought his lifestyle down quite a bit and he must have lived on the beach an awful lot."

(d) Re people who evade taxes: "Yeah, but it's usually the ones with the money that avoid it anyhow, isn't it? So they usually can get out of it with good lawyers and everything."

(e) Re Nick Taylor's efforts to improve society through political action: "He's part of the problem too, though, isn't he, 'cause he's got oil refineries."

e. Language Used for Speculation

There is a larger percentage of speculation statements in the transcripts of Grade XI in the with-teacher context as in the students-alone context. The type of speculation is similar to the type found in the students-alone context. These statements usually related to people or specific social situations rather than speculations about the world in general.

Two students speculated about the man on the beach: "I think what made him drop away and go live on the beach was pressure. And he just had to get away from it all and go by himself." "He coulda been sorta outdoor-going since he was really young." Another student considered what it would be like for youths like himself to live on the beach--"We'd miss a lot of the things and it'd be very hard to do, I think."

The film's references to pollution combined with teacher questions generated statements of speculation such as the following: "I think a lot of Canadians just will say, 'Well, it's a good thing we're having all this anti-pollution stuff, but--you know, don't involve me with it.'" "They probably don't think that they have to do anything about it." "Probably they care, but they don't really want to get involved."

In a discussion of change, one girl said, "We're brought up with change: we can adjust to it." When the teacher questioned this and asked, "Why?" the girl replied, "Maybe as you get older you're worried

about, um, you don't have as long to live, you're worried about the way things are going to turn out and you would rather have something secure to hold onto."

A teacher in a boy's group said he didn't make long-range financial plans. The boys responded with the following:

L: But what if things get worse? Say you, say you go into another depression--there's another depression, then what are you going to do?

M: Then you'll be stuck with not a place to go!

L: Yeah.

5. Comments on Language for Learning in Grade VIII and Grade XI

All of the transcripts contain some evidence of language capability for use in learning. At the Grade VIII level, two of the eight groups in the students-alone context used language mainly for social control and improvisational activity rather than language for learning. In the other groups, the Grade VIII students-alone made many generalizations, inferences and speculations, but had a more limited number of statements recalling information. Grade VIII students-with-teachers did not create improvisations or use word play. They produced many examples of generalizations, inferences and recalled information, but produced fewer examples of speculation.

The Grade XI students talking in the students-alone context produced many statements introducing information about the film and their own experiences in the world. These statements were frequently used to explain and justify their generalizations, inferences and speculations. In the students-with-teacher context, their answers to the teachers' questions were mainly generalizations and inferences. These were not accompanied by informational references as frequently as in the students-

alone context. Speculation in the students-with-teacher group was more frequent, but of similar type to the speculation which occurred in the students-alone context.

Comparison of Results from the Four Types of Analysis

There were both similarities and differences between grades and between contexts as shown in the results of the four types of analysis. The results of the analysis of syntax indicate that there is more difference between the students-alone context and the students-with-teacher context than between Grade VIII alone and Grade XI alone. This was also true for some of the function categories, but not for all of them. The results of some function categories showed distinct differences between the two grades. The results of the analysis of discourse did not contradict any of the trends indicated by the analysis of syntax or the analysis of functions. However, the analysis of discourse did reveal that where the numbers in each category might be similar between grades or between contexts, there were frequently qualitative differences which could be observed. The analysis of breadth of vocabulary was the only type of analysis which failed to reveal differences of consequence between grades or between contexts.

The results of the four types of analysis show that there are differences between the language produced by the students in Grade VIII as compared to the students in Grade XI, but differences do not occur in every category. The results show that there are also differences between the students-alone context and the students-with-teacher context. However, in some categories the Grade XI students showed more differences

between contexts than did the Grade VIII students. Differences between grades do not indicate a regular pattern of development from Grade VIII to Grade XI along a continuum. The pattern of distinction is a broken line, varying according to the feature observed.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS FOR FURTHER RESEARCH

Summary of the Study

This study examined the informal language used by Grade VIII students and Grade XI students talking in small groups in a classroom setting. At each grade level students were shown the film Lifestyle to induce a flow of conversation. Each school class participating in the study was divided into single-sex triads. Each triad met for one-half hour to discuss the film or topics arising from the film. One-half of the triads were joined by a teacher in the first fifteen minutes of their discussions: the second half of the triads were joined by a teacher in the last fifteen minutes of their discussions. Each group received a small tape-recorder to record its conversation.

Transcripts were made from the tapes of four Grade VIII boys' groups, four Grade VIII girls' groups, four Grade XI boys' groups and four Grade XI girls' groups. Two of the tapes of each sex and each grade were recorded in classes of a small-town school. Two of the tapes of each sex and each grade were recorded in classes of a city school.

Each transcript has two parts: the first is a transcription of the recorded talk of three students talking alone, the second is a transcript of four minutes of the recorded talk of three students and a teacher.

The analysis of the transcripts focused on four types of features:

syntactic structures, vocabulary breadth, the use of functions, and the progression of the discourse. In the syntactic analysis, the numbers of each type of syntactic unit were counted and the average length of the T-units calculated. The type-token measure was used to obtain information about the breadth of vocabulary. A set of function categories was developed and each T-unit assigned to a category. An analysis of the progression of the discourse gave information about the topics chosen for discussion, the extent and types of participation, the use of language to explore personal issues, and the use of language for learning.

The analysis of these features of informal talk was designed to contribute to the currently available knowledge about the characteristics of oral language used by Grade VIII students (early adolescence) and Grade XI students (late adolescence) and how the presence of a teacher affects language production at each grade level. Through the information gained from this study of informal, oral language, teachers in every subject area may discover some insights about (a) how adolescents may change in their use of language from early adolescence to late adolescence; (b) how students in Grade VIII and Grade XI may use language when talking in small groups; (c) how the presence of a teacher may change small-group language production. A teacher looking at this study might also find insights which would suggest ways that spontaneous, informal adolescent talk may be developed into formal and written language forms.

Summary of the Findings

The syntactic analysis revealed that the student participants in this study in both contexts and both grades spoke more T-units than any

other type of syntactic units. The Grade XI students used more T-units than the Grade VIII students. In the with-teacher context the Grade XI T-units were longer than the Grade VIII T-units, but the T-unit length was similar for both grades in the students-alone context. There was much more variation in T-unit length within the Grade VIII groups as compared with the Grade XI groups. The T-units used by both grades combined were longer in the with-teacher context than when students talked with peers only. This was statistically significant.

The type-token measure showed no significant difference in the variety of words used, either in comparison of grades or in comparison of contexts. The number of different word types used per 100 words varied only slightly from Grade VIII to Grade XI or from the students-alone context to the students-with-teacher context.

The analysis of the functions of language revealed that there are some similarities between the students in Grade VIII and the students in Grade XI with regard to the uses they made of language. In both contexts the Grade VIII students uttered low-level generalizations approximately as frequently as Grade XI. In the students-alone context Grade VIII had slightly more T-units assigned to the "Speculations" subcategory than Grade XI. The analysis of speculation in the progression of the discourse identified a difference in type between the Grade VIII speculations and the Grade XI speculations; the Grade VIII speculations were frequently very abstract, whereas the Grade XI speculations were more often related to concrete situations. A distinct difference in the proportion of T-units in the "Speculation" subcategory occurred in the with-teacher context. The Grade VIII proportion was less in the with-

teacher context while the Grade XI percentage was much higher in that context.

In the students-alone context Grade VIII had a greater proportion of T-units than Grade XI in the following: Commands; Information Statements; Disagreement Responses; Insults; Threats; Universal Generalizations; Role-playing Statements; Word-play Expressions; Expressions of Fantasy; Irrelevant Statements. The Grade XI students had a greater proportion of T-units than Grade VIII in the following: Elicitations; References to the past; References to the present; Statements Alluding to Personal Feelings, Experiences or Assessments.

In the students-with-teacher context Grade VIII had a greater proportion of T-units than Grade XI in the following: Commands; Information Statements; Supportive Responses; Disagreement Responses; References to the Past; Irrelevant Statements. Grade XI had a greater proportion of T-units than Grade VIII in the following: Elicitations; Speculations; Statements Alluding to Feelings, Experiences or Assessments; Expressions of Fantasy; References to the Present; Low-level Generalizations. The proportion of T-units which were Universal Generalizations was similar for both grades in the students-with-teacher context.

An investigation of the progression of the discourse showed that both the Grade VIII and the Grade XI students talked most frequently about people and social problems. Grade XI talked about more divergent topics than Grade VIII. In the with-teacher context both grades talked about fewer different topics and fewer topics not directly related to the film.

Grade VIII participation in the student-alone context varied a

great deal from one group to another. Two groups did not stay with the task of discussing the film, but made jokes and inventive word-play instead. In two groups, only two persons contributed to the talk. Much of the time Grade VIII students failed to involve each other in the conversation to any significant extent. However, in most groups each person made a substantial contribution to the discourse. These Grade VIII students made frequent dramatic, unusual or attention-eliciting remarks in the students-alone context. In the students-with-teacher context, most of the participation was in response to the teacher. The students shared the responsibility for answering the teachers' questions. With the exception of one student in one group, all the students contributed to the talk when a teacher joined the group. When a teacher was present the students were matter-of-fact and did not present jokes or dramatic improvisations.

At the Grade XI level all of the students participated when in the students-alone context. They frequently encouraged each other to speak and made supportive responses. Although differences of opinion arose, they were able to resolve them amicably. The teachers participated extensively when they joined the Grade XI groups. With the encouragement of the students, they frequently gave extensive expressions of personal opinion and descriptions of experience. The students responded readily but briefly to the questions of the teachers. In each context the Grade XI students demonstrated many of the participation characteristics which encourage the kind of group discourse which could be useful to promote learning. They frequently invited each other to speak. They contributed relevant information from past experiences and assisted reasoning processes by giving specific references and examples.

Personal references observed in the progression of the discourse included references to personal experience, personal identity and personal values. References to previous personal experiences occurred in four of the Grade XI groups in the students-alone context and in two of the Grade XI groups in the students-with-teacher context. At the Grade VIII level, there was only one reference to past personal experience in the students-alone context and none of these references in the students-with-teacher context.

In the students-alone context the Grade VIII students made joking remarks about themselves and imaginative suggestions about the future. They also discussed sex roles and the problems of group conformity versus individualism. In the students-with-teacher context there were very few references to personal role or identity.

At the Grade XI level in the students-alone context, there were many references to families, personal interests and self-analysis in the girls' groups. Two boys' groups included references to personal identity and two groups did not. In the students-with-teacher context only two Grade XI groups referred to personal identity.

Grade VIII in the students-alone context made remarks which, if taken literally, might appear to be expressions of personal values. However, in the context of the group they were clearly intended to be jokes. For example, one girl in a conversation about school caused the other girls to laugh when she said, "It's a waste of your life." The students in some groups expressed serious concerns about pollution, the fast pace of life, employment problems, gangs, cliques, and the "false faces" of advertisements and politicians. There were fewer references to personal values in the students-with-teacher context. Several of

the statements which were made were in response to a teacher's question.

In the students-alone context Grade XI made frequent statements of personal values. This was also true in the students-with-teacher context, although in that context the statements were usually less personal and more of an expression of opinion.

Grade VIII in the students-alone context produced samples of each of the different types of language for learning which were investigated. The entire transcript of some groups was composed of shared information, clarifications of words and references, generalizations and speculations. Other groups mixed jokes and comments about the situation with language for learning. Two groups had difficulty sticking to the task and produced very few language-for-learning types of utterances. In the students-with-teacher context the extent of language-for-learning statements depended on the teacher's style of participation. When a teacher asked many short, factual questions the students made contributions of only a few words. When a teacher's questions were open-ended, the students produced utterances which could be considered language for learning.

Grade XI in the students-alone context exhibited proficiency with many of the language forms needed for learning. They introduced an extensive amount of both general and precise information. They frequently added to each other's descriptions and comments. Sometimes they would clarify information by asking questions or by adding a modification to another speaker's contribution. There was evidence of reasoning by means of a series of inferences or by cause and effect deductions. These Grade XI students made a number of statements which could be considered

speculation, but these statements were usually about specific people or specific situations. They did not make abstract speculations about the problems of the whole world of the type made by the Grade VIII students.

The teachers who met with the Grade XI groups affected the responses of the students by asking many questions. Information contributed by the students was usually in response to a teacher's question. In this context the students usually did not question each other or add to each other's contributions. The students composed many generalizations and speculations to answer the teachers' questions.

Conclusions

The findings of the present study indicate that there are identifiable differences between the informal talk of these Grade VIII students and that of the Grade XI students. However, the differences do not necessarily follow a definite progression. For example, the length of T-unit did not show a regular increase from Grade VIII to Grade XI. In the students-alone context the difference was minimal, whereas the difference between the grades in the with-teacher context was much greater. Almost no difference either by grade or by context was shown in the type-token measure of breadth of vocabulary.

The differences between Grade VIII and Grade XI with respect to the functions for which they used language also indicate support for the view that increasing age does not always bring about a simple increase in complexity of language. One example from this part of the analysis is the difference in tendencies to use abstract statements. Grade VIII in the students-alone context made more statements in the most abstract

category than were made by the Grade XI. The difference between Grade VIII and Grade XI appears to be in the extent of supportive references which accompany abstract statements rather than the number of abstract statements or the degree of abstraction.

The features observed in the progression of the discourse provide further evidence that the differences between Grade VIII and Grade XI are not necessarily incremental along a continuum, but they may be differences in type or style of language. Grade VIII in the students-alone context used inventive and dramatic language extensively. Grade XI tended to use more explicit forms of discussion.

From this limited investigation of some features of adolescent talk there is evidence to suggest that the spontaneous, informal language used by Grade VIII students is different from that used by Grade XI students. In addition, the differences can be studied by obtaining and analyzing samples of the students talking in small groups. The differences which occur between early adolescence and late adolescence are not self-evident, but must be discovered by analysis of the language actually produced by subjects of these age groups.

Implications

1. This study shows that in relatively spontaneous, unstructured conversation, the students in both Grade VIII and Grade XI used language to explore and analyze their perceptions of the world and how it works. At both grade levels they used the full range of functions from management of the situation to universal generalizations. Although differences between grades exist, the study shows that adolescents of both grades in the students-

alone context displayed an intellectual interest in the world and a command of language sufficient to process their considerations of the nature of the world and of how they would like it to be. The fact that students in this type of unstructured situation voluntarily use language in ways that promote learning implies that informal discussion has potential as a technique for developing cognitive growth.

2. This study contains numerous examples of language abilities being extended when students interacted with their peers. In the analysis of the progression of the discourse there are descriptions of students helping each other to state ideas more fully and more clearly, of mutual vocabulary development and of group co-operation in word-play and improvisation. These examples of groups working together indicate that small-group, students-alone discussion has potential as a technique for developing language growth.
3. Differences between the Grade VIII students and the Grade XI students suggest that teachers need to use different types of procedures with different grades. The problems the Grade VIII students had with group processes and the attention these students paid to the circumstances of their conversations imply a need for carefully planned experiences to develop cooperative styles of talk rather than individualistic ones. Their inventiveness and word-play indicate they need opportunities to create poetic and fictional language. Role-playing activities would seem well-suited to the Grade VIII style of producing language. These Grade VIII students showed extensive interest in abstract

generalizations and speculation. School activities which provide opportunities for them to develop and refine this aspect of their conversation could be helpful to these students. In addition, teachers of students who tend to use abstractions without accompanying references could devise group projects which require some attention to specific references. Schools should plan strategies for the gradual development of reasoning processes from early adolescence to late adolescence.

The Grade XI students in this study showed more ability to interact with each other than did the Grade VIII students. However, these language skills for group processes need development. Some groups floundered when a person who dominated the conversation complained about having to do all the talking. In addition, the rudimentary reasoning skills shown by these students need to be refined and developed further. Teachers could prepare activities which would gradually move students into more formal ways of investigating social and personal issues and assist them to cope with the increasing demands on language which would be involved.

4. The syntactic analysis shows that approximately one-half of the syntactic units are not full T-units. This should give teachers an indication of the modifications in expression which are necessary for students to move from oral language to written language (which is composed mainly of complete T-units). Since informal group language flows quickly and spontaneously from the mind of the speaker, it is likely that this language reflects the implicit

and fragmented way language is used for thinking. Teachers should consider devising activities which help students convert syntactically fragmented language to complete sentences or T-units. Consideration should be given to starting with writing activities in which the syntactic structure parallels informal conversation. Diaries, journals and letters free the writer from concern over syntax. The recognizable difference between the syntax of the informal talk of these students and informal prose implies that student writers could benefit if their teachers planned strategies to help the students move from one syntactic style to another.

5. The variety of ways individuals within each grade responded indicates that teachers should consider planning for a variety of responses to their presentations and assignments. For example, the extreme fluctuation of T-unit length between the groups in Grade VIII shows a wide difference in syntactic style. This suggests that lesson plans and expectations for pupil behavior should be flexible and easily adapted to meet a wide variety of needs and abilities among students of the same age.
6. Although teachers' behavior was not the subject of this study, the student responses to the various types of teacher participation could help teachers evaluate how different styles of teacher involvement affected the groups. Teachers might find it useful to reflect on the reasons why the percentage of T-units spoken by students was less in the with-teacher context as compared to students-alone. Also, why were T-units longer in the with-teacher

context? Why were there more edits and tangles when a teacher was present? The teachers in this study frequently interrupted the students as they were speaking. Could this be avoided? In some groups in this study the amount of student participation in the with-teacher context was very small. This indicates the teacher did most of the talking. In these groups it seems evident from word count and from the progression of the discourse that teachers did not adjust their style of participation to the small-group situation. Their presentations to the group were similar to presentations more appropriate for a large class. The results of this study imply that for small groups to benefit from the presence of a teacher, the teacher must learn the kinds of responses which are appropriate for group interaction rather than whole class situations.

7. The methods used in this study to record and transcribe the informal conversation of adolescents have implications for school staffs who are developing language policies which apply to all areas of the curriculum. Since the publication of the Bullock Report in England in 1975, the movement to assess language uses across the curriculum has gained popularity around the world. Many teachers, therefore, are looking for ways to observe and assess the ways their students use language. The method of taping a whole class at one time as they meet in small groups is a practical procedure. (Extra tape-recorders can be borrowed.) Because transcribing conversation is very time-consuming, teachers could shorten the procedure by listening to the tapes

and making notes on important features. However, there is value in transcribing. Not only is it useful to have the language in written form, the process of transcribing is instructive. Dever (1978:183) states, "Most people are amazed to find, when they finally finish their first transcript, that they have never before listened to the way in which children say what they say."

8. The methods of analysis used in this study could be used by teachers. These types of analyses generate information which could help teachers to identify the language capabilities which their students demonstrate as well as the difficulties they experience. On the basis of this information, programs may be planned to build on the students' accomplishments and meet their specific needs.

Suggestions for Further Research

The basic techniques used in this study for obtaining the unrehearsed, spontaneous talk of students in small groups were successful. Future studies based on the analysis of talk collected in this manner could provide valuable information to help create a pattern of how language develops during the adolescent years. Studies of each age group might reveal more closely the sequence of changes.

Modifications of the techniques and equipment used in this study might overcome some of the technical problems. Individual microphones for each person instead of one microphone would probably make it possible to be more certain of the specific speeches of each individual. This would increase precision and allow for statistical tallies by person as well as by group.

If a large sample of student talk were collected and transcribed, consideration could be given to using a computer program for assistance in some types of categorization. For example, computer programs can be used for lexical analyses.

If technical and legal problems could be overcome, samples of the talk of adolescents in out-of-school contexts could be collected. Comparisons could be made of peer-group talk within the school and peer-group talk in shopping malls, entertainment centres, sports events and home environments. Because the preferred peer-group probably has a substantial influence on language production, studies of this language could provide significant information about out-of-school influences on adolescent language.

Future studies could investigate the possibility of differences between the sexes in informal language production. Also, studies of the differences between the informal language of high achievers and lower achievers could be useful.

A study which focused on the effects of different types of teacher participation in small student groups might give pertinent information to teachers. This could involve deliberate manipulation of the teachers' language styles and a comparison of the pupils' responses to the different kinds of teacher-involvements in the conversation of the group.

Different tasks set for groups to talk about as their conversation is recorded could form the basis of another study.

There is also need for more information about the types of language demands created by different subjects of the curriculum. Future

studies should set tasks which relate to specific subjects so that students' responses may be studied.

There are few studies available which describe the characteristics of adolescent language. The need to know how language competencies develop during this stage of life is very great. This study was undertaken for the purpose of gaining some information about the language produced by small groups of students in Grade VIII and Grade XI. If it encourages further research about the language used by adolescents, it will have served a useful purpose.

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APPENDIX A

INSTRUCTIONS TO STUDENTS

FILM DISCUSSION GUIDE

INSTRUCTIONS TO STUDENTS

Today you have seen the first half of the film Lifestyle. Now we want to find out what you have to say about the film. You may have many different things to say. Instead of asking you to write down your ideas, we would like you to meet in groups of three and we will give you a tape recorder to keep track of what you say.

Before you begin your discussion please test out the tape recorder to make sure that each person is talking so that he can be heard. Take turns giving your first names. Please do not give your second name as it is not necessary. No one in your school will hear the tape so you do not need to worry about being identified.

Now begin your discussion. You have thirty minutes to talk about the film.

FILM DISCUSSION GUIDE

There are many different things about the film which you might like to discuss. Consider the following:

(a) the most impressive scenes in the film;

(b) the people in the film;

(c) the photography and the sound effects;

(d) the way the film is organized;

(e) the usefulness or the uselessness of the film.

APPENDIX B

INSTRUCTIONS FOR PARTICIPATING TEACHERS

INSTRUCTIONS FOR PARTICIPATING TEACHERS

This is an informal discussion about the film Lifestyle. We want to find out what people have to say about the film. Instead of writing down their responses, we have asked the students to talk about the film. A tape recorder will keep track of what is being said.

You do not have any special responsibility in the groups. Just chat with them as though you had met them in your home or in the cafeteria.

APPENDIX C

THE FILM: LIFESTYLE

THE FILM: LIFESTYLE

Lifestyle was the film used as a stimulus for producing language. This film was originally produced for the London Life Insurance Company and was broadcast on the C.T.V. television network during "prime time." It is one of the Human Journey series.

The film has many different kinds of people, many different locations and deals with many different issues. It was selected as a stimulus because it presents information and people likely to interest both Grade VIII and Grade XI students. In addition, it has many different types of situations and people, so that each student is likely to find something to respond to in the film.

Film Summary

As an introduction, the film demonstrates briefly the way a variety of people live and thus presents the concept of "Lifestyle."

A presentation of the life of an one-hundred-year-old man introduces the concept of historical and technological change. This centenarian is shown serving customers in a hardware store managed by his son. The film then illustrates, in chronological order, the inventions which occurred during this man's lifetime and some of their effects on modern life.

One of the effects of technical change is stress. The film shows interviews with several scholars who explain and illustrate theories of how stress is linked to medical problems. If your life situation changes drastically in a short time, they suggest you run a high risk of serious medical problems.

Pollution is the second problem of technology explored by the film. Pollution problems from factories, oil refineries, cars and sewage are illustrated.

The second part of the film illustrates a variety of lifestyles by showing the homes of a variety of people. Some of the people are interviewed.

First, Margot Kidder, a Canadian actress, is shown on a beach near Los Angeles. The film also shows her in a car driving to the upper part of a mountain where she lives, to try to get away from the Los Angeles smog. Back on the beach, Margot meets a former film executive who quit his job and now lives frugally on unemployment payments. Finally, she is shown on a ranch she owns in the Okanagan area of British Columbia.

Secondly, the film presents two lawyers from the Riversdale community in Toronto. Their lifestyle is affected by their efforts to improve the living conditions of the people in their neighborhood.

Next, there is an interview with Nick Taylor, a millionaire oil executive from Calgary. He is shown with his wife and nine children. Later, Mr. and Mrs. Taylor are shown on a trip to Ireland and Yugoslavia.

Less affluent people on the Gaspé Peninsula are shown living in tiny, bare houses on a barren landscape. Young men from this area are shown riding on a train to Montreal, where they hope to obtain employment. One family with eighteen children is shown worshipping in a Gaspé church.

The film closes with a series of questions about "Lifestyle."

APPENDIX D

TRANSCRIPTS OF THE DISCOURSE

TRANSCRIPTS OF THE DISCOURSE

Grade VIII Boys Alone

J: A lot of things she said are true. And will probably happen. Course no one can foretell the future.

C: Yeah, well. Said we might be gone in thirty years. I think she's right.

J: I don't think so.

C: Sounds logical.

W: Well, the thing is people aren't supposed to be pessimistic and think about those kind of things.

(strange noise, laughter)

W: Shut it off.

J: Yup (they do, then turn it on again)

C: Uh, well, you know that film, it, it was, uh, it kinda made ya think eh, don't you think. Well, we don't have to have the second part, but the first part alone would--you could call it a show in yourself. I think 'cause it was--it made you think, you know, it wasn't like a comedy, made you laugh, but you sat there and just, I guess you could say it was engrossed in the film and that, yeah, it, I don't know, it's just something different that you see.

W: Yeah, well, sometimes, you know, it makes yuh feel something about, you know, showing all the old people, and their saying this stuff about, you know, if you do too much or you get so many points and you overwork yourself and that way--She's doing too much (pause). She is!

J: Yeah, well she, she admitted that she was, she was doing too much. Sure she did, people should slow down. Life is going too fast. People should slow down and take it easy.

C: Not necessarily, if um. I guess maybe I'm kinda old. I don't agree with that, 'cause . . . .

W: Well.

J: Thirteen.

C: Yeah, but what I mean is I wanta, I want as soon as I'm through high school, I don't think I'll have any spares, if, if any, I might have a forty-minute spare during high school. I'd go right through college and university. I, I, I, I, I wouldn't take my time and quit for a couple of years.

J: You mean you don't agree that life should s, slow down. That, that our society right now is too hectic?

C: Well, it's uh, it's hard to say, it's um, if you can have, if you find time for uh activities sure, but . . .

W: Football and baseball and all that sort of thing.

C: Yeah, well, you always have to say, you can't always work, you always have to uh fool around and say work and then say "Look, I haven't been playing football with friends or somethin' for a month or so, and say okay I'm not doing any homework for now, I'm just going to quit and have a break." But you know, you know, you, you still have to remind that you have a job or you have work like, you can't, you can't really let it all go.

J: Oh yeah, I agree with you there I mean. Like that guy on the beach – that was just livin' off unemployment, I mean, that's not fair to the other people that are working. Now that, I don't agree with.

W: Well, I don't think maybe . . .

J: But, the fact that we can't, we don't have time to go see people that, you know, relatives and that it's, it's not right.

C: Well he's, he's making life worth makin' his life worth it. I agree with you partly. I agree.

W:
J: (Together) She isn't. But not for anyone else.

C: Yeah, I agree with that.

C: Yeah, I agree with you with that.

J: People that are payin' taxes are payin' for him to live in his shack on the beach and walk along the beach. Everybody'd love to do that.

C: But he's not going out and not buying a big expensive car and big expensive house.

J: 'Cause he can't afford it.

C: Yeah, well Geez--he lives, he likes . . .

J: He's eatin' isn't he--no?

C: He likes the way he lives. That's probably the only thing he wants. He's working off unemployment for just for the food.

W: Yeah, okay, but . . . You say you admire his lifestyle, but I . . .

C: No, I didn't say that . . .

W: You said it's worthwhile. But he's making nothing of his life. He's, he's gonna be a bum. Now, okay, if, like, I, myself, I wanta be a doctor and that's a profitable . . .

C:
W: (Together) Same here. Jim, what do you wanta be? Not only a profitable, but a . . .

J: Garbageman.

W: Yeah. Jim wants to be a sanitary engineer.

Grade VIII Boys-with-Teacher

J: Yeah, what are we, what are we doing to ourselves, that's mostly what the film was about.

C: Okay.

J: See, talk about pollution. St. Lawrence. You know that algae, that was terrible, and the dog sick. With pollution right past it.

T: What was it caused by?

J: It was . . .

C: Septic.

J: Yeah. Waste particles, according to them. Strange thing that grows . .

W: It's a bug.

J: What?

W: It's a bug.

J: No, it isn't.

W: Algaes.

C: Al eaters.

J: Algae is a plant growth.

T: I'd say that it's a bacteria growth. But I also think that they brought up the fact that it might have been from the septic tanks.

C: Yeah, that's right.

J: Yeah, well, algae is a it's a bacteria, yeah, but it's, it's a kind of a plant growth.

C: Yes--they grow on it. Well it seemed to me that they had cars--an awful lot of cars. Why, why do you think they showed so much about uh cars?

J: That's what's mostly . . .

C: It's a big problem. They have so much pollution by them.

J: You don't really need em--uh.

C: if . . . like . . . people have two or three cars and if the city was properly designed with uh, subways, er E.T.S. or something like that . . .

J: or bicycles.

C: er, well, even something like that, but see cars is just taking up so much space uh, roads and that and an--it's uh pollution they're pollution.

T: I, I've had another idea from--besides pollution. You don't have any other ideas of what um cars are doing or what influence they have, negative influences on the people.

J:
C: (Together) Well, they're startin'. Stops them from getting exercise.

J: Yeah, they're gettin' lazy.

T: Yeah, that's one thing, yeah, but . . .

C: Well, you know, they're depending, well, I'll go out and buy a car today, I don't feel like walking so I'll take a bus, so I'll get my friend to drive me over.

W: You have to have transportation.

T: But in order to accommodate so many cars what are they doing is the thing that struck me . . .

C: Making wider roads.

T: Right. And what happens when they make wider roads.

C:
J: (Together) Well, the people, like, most of the people's . . . Smaller neighbourhoods, and uh, there're not many places to stay. So that's why--that's a disadvantage.

T: And then they build the um . . . The way I understand it was that because there are so many cars and they need wider roads they have to take down uh buildings and then people have to move farther out and spend more time and get more cars to come into the city.

C: And waste more money.

T: Yeah.

J: So, all because of uh, Henry Ford.

W: (groan)

J: We're stuck with the problem.

C: Yeah, well, uh--excuse me.

J: The first part of the film was pretty good. She was talking about that girl and stress--and putting, you know, too much pressure on you. I don't think that's really true, but, thinking well, oh well, I'll retire this year and I'll go and build a cottage this year--cottage this year--I'm, I'm sure that has no thing--nothing to do with it--extremely--I retire and that's it--so I'm gonna go move somewhere else.

C: Yeah, that's the psychological, the effect of just too many things happening. Uh, you, it's just too much of a change--just like--well I, I guess you've heard of the bends--whenever you're down--like if you have such a big change of pressure it'll hurt you and psych-, psychologically too.

Grade XI Girls Alone

H: Well, like, we never drink, never.

M: What do you do?

H: We drive around. Sometimes we'll sit and we'll talk for hours, just hours (pause) and go to a show and we watch the show and we drive around and maybe go home or we, um, at least, just about at least once a week he comes over and just stays and watch, we watch the movie and sit there and laugh about it--go to parties, but I don't enjoy parties any more because, because um--

M: I know, it's dumb--everybody else is drinking and stuff and making fools of themselves and you're just sitting their watching.

H: Yeah. And a lot of times I've just gone and gotten drunk because I wanted to join the party and have a good time and that way you weren't left out and yet you feel so--even while you're doing it you feel dumb. People look at you, people that aren't drunk, 'cause there's always going to be some, and then, then afterwards you feel really rotten, so. No way that anymore. Just--um

M: Yeah (6 second pause).

L: Lots of times, Phil, he'll drink, but I won't you know--we'll go somewhere, I don't, I don't know, I don't really like--drinking.

M: I used to have parties. I hate them now.

L: Sometimes I think I'd like to go until we get there. Then I don't like it.

M: Yeah.

L: I like to go to parties with just maybe six people or something.

H: Oh, yeah.

L: And you just sit and talk, you know or play cards er. Like on Friday, we played "Aggravation" for I don't know how long. We just had a riot. Went water skiing then we went--played Aggravation. I didn't water ski.

(pause)

M: I don't know, I think it's uh a part of being accepted, like, like now I don't care as much to be accepted.

L: I know I don't either.

M: 'Cause--because as long as I'm accepted with one person, you know, I don't, I don't, I want to be accepted, I want to be really good friends, but I don't want to be, you know, overaccepted and that's what I wanted before.

H: Yeah.

M: So now I don't want much . . .

H: Yeah.

M: More now. So I don't need to do all those things.

H: I know.

M: But just--like even right now I don't, I don't really care. I don't really care what people--Oh, I care what they think of me, but, like, if I think I'm doing my best and somebody puts me down for that, it doesn't bother me like it used to.

L: And I--go ahead.

M: Go ahead.

L: No, and I'm not afraid of um, to tell people what I think of what they're doing anymore, either. I used to think, well, you know, they're doing that, and I think that's really bad, but, you know, I can't say nothing. But now, you know, even more than I should, I suppose, 'cause lots of times it's none of my business, I'd tell them--"I think that is really stupid, you know. I mean, that's really ignorant. I thought you'd know better than that." Because I think, I think they should . . .

L: But you know what, K, that's sorta judging.

M: I know it is and I think it's--I know it's . . .

L: You should tell them why that thing bothers you.

M: No, it all depends what kind of a thing it is though.

L: Yeah.

M: You see, it it's something that I really don't believe in . . .

L: Yeah.

M: It it's something--like say a person goes and breaks somebody's window, I mean . . .

L: Yeah.

M: That's not accepted by anybody, I'll say, you know, like, I think that's really dumb.

L: That is, that is -

M: I'm not saying that if somebody's drinking . . .

L: Yeah.

M: That I think that's really ignorant, but if they do something that's really-- or if they hurt someone.

L: Yeah.

M: I mean, I don't . . .

L: Just like when those guys wouldn't give--give Wendy and Dee a ride.

M: Wendy and Dee a ride. Yeah. They make me so mad. Or if--just doing something outright to hurt another person.

Grade XI Girls-with-Teacher

H: But it just shows us how it can affect us. We have to sort of (pause)

L: Control it.

M: Yeah.

H: Sorta showed the difference between old people and young people--how young people are reacting better because they sorta take things as they--a day at a time.

T: Why do they? Why don't old people do that?

H: Because we've seen so much change in our lifetime. They--when they were our age things weren't changing that fast so you didn't have to . . .

L: Yeah, everybody did more or less the same thing and thought sorta of like the same thing or something like that.

T: Talking about older people?

L: Yeah, when they were our age.

T: Well don't you--Doesn't everybody here register the same thing, more or less, well . . .

L: Sorta.

T: Why should you feel able to take change better than your parents, for instance, if they did, if you, you were both raised the same sort of ways.

M: We see, we see how they are and we can see how we are and that's that's a lot of difference.

T: Well.

M: We've seen so much change, though.

H: Yeah

M: They didn't see change until they'd really, until they's already um, had their lifestyles say formed. Like, say you're about twenty years old or something and by then you're sort of got your patterns.

T: What difference does that make?

M: Well . . .

T: Why does that . . .

M: We're brought up with change--we're, we, we can adjust to it.

T: But it change is constant. You don't want, er, you know, is constantly going on--you'd think after twenty years of it they'd be more used to it than young people.

(6 second pause)

T: I mean, change didn't suddenly happen the day you were born and uh you were born right in the midst of it so you're used to it while your parents--there was no change before you were born, I mean, it's

been going on quite a long time--but why is it young people can cope with it better than older people?

M: Well, maybe as you get older you're worried about um, you don't have as long to live, you're worried about the way things are going to turn out and you would rather have something, something secure to hold onto.

T: Yeah, I'd say so, something like that. Let's give some examples of change. Sorts of changes that people have that worry people--cause lots of tension. What were some of the ones that were said in the film?

L: Change in lifestyle.

T: Changes that you always used to worry about. Change your clothes.

L: Change jobs, moving . . .

T: Moving, yeah, changing your job.

M: Something in your family. Someone gets really sick er restless -

(pause 6 seconds) a love affair (giggles).

T: So how do you cope with those? How do you prepare youself for those kinds of changes--that reduce. I, I guess from what you've told me the idea is to reduce as much tension as possible. Don't let change get to yuh so that it affects your health. So how do you do? How do you go about reducing the chances of heart attack, or--

(pause 3 seconds)

M: Take one day at a time, slowly.

T: Yeah, but you'd. I just can't see taking a day at a time and all of a sudden something happens which you didn't prepare for, which you don't take a day at a time--you are not preparing in advance--suddenly something happens--it's going to be even worse for you. (pause 4 seconds). I don't know. You saw the film, you tell me.

M: They didn't really tell us how to cope with things that sort of--idea that they put across was that you can't, you can't stop it, the way our cities are, are um--are growing--the way we're sh-moulding our world.

T: Can't be stopped? What do you mean?

M: We really are--we really aren't in control of our own destiny. But that we have to try as hard as we can. But I mean we can't control it totally.

T: Who does?

M:
T: (Together) I dunno. Society as a group um, if we can live . . .

Well,there must be some intelligent leadership because, my god, there's let's say in Edmonton, there are 450, 500,000 people and they're spending oodles of money every year and putting in new roads, new houses and everything else . . .

APPENDIX E

A SAMPLE OF A SYNTACTIC ANALYSIS CHART WITH FUNCTIONS FOR T-UNITS

ABBREVIATIONS

T-unit -- T | Hold -- H | Incomplete-Partial -- IP
Partial -- P | Tangle -- TA
Edit -- E | Non-lexical -- NL

Grade XI Boys

	Type of Unit	Number of Words							FUNCTION
		T	P	E	H	TA	NL	IP	
What was it about?	T	4							IB2
I think I was sleeping in that part.	T	8							IIA1
Uh	NL						1		
I'm not sure.	T	4							IIE
Um	NL						1		
It kinda gets to me.	T	6							IIE
Really?	P		1						
That part when they were opening -	P		6						
When they were up at	IP							5	
Uh	NL						1		
Thanks	P		1						
When they were in that town up in the North, there.	P		11						
Oh, yeah.	P		2						
What were	E			2					
What do you call it?	T	5							IB2
North Bay or something	P		4						
Like it [the film] was hard to believe when that family was living in that house with two rooms, that shack.	T	19							IIB
The one with T.V.?	P		4						
Deep freeze.	P		2						
Yeah, all kinds of radioactivity.	P		5						
And that lake with all that algae.	P		7						
Oh yeah, that was sick.	T	5							IIB
And that beach with all those power lines	P	8							

ABBREVIATIONS

T-unit -- T Hold -- H Incomplete-Partial -- IP
Partial -- P Tangle -- TA
Edit -- E Non-lexical -- NL

Grade x1 Boys

	Type of Unit	Number of Words							FUNCTION
		T	P	E	H	TA	NL	IP	
Geez	P		1						
Yeah	P		1						
Well what	TA					2			
Did you see those guys were all in bathing suits?	T	10							II A1
And then	E			2					
And there was clouds all over the place.	T	8							II A1
Yeah, smog.	P		2						
You couldn't	E			3					
The sun couldn't shine on you or nothin'	T	9							II A1
Even tan from that.	P		4						
Well, what's the matter?	T	5							I B2
Smog tan.	P		2						
And they had that	TA					4			
When they were at that lake that was all polluted with crud and stuff they said, "Father and son playing in the water."	T	23							II A1
Uh.	NL						1		
Yeah.	P		1						
Well, that's the one about the algae.	T	8							II A1
I wouldn't be playing around	T	6							II E
Which reminds me	P		3						
What	P		1						
We were at Cross Lake there one time, a couple of hundred miles away	T	14							II A1
And it was just about as bad as that green.	T	10							II B
You went in it?	T	4							I B2

ABBREVIATIONS

T-unit -- T Hold -- H Incomplete-
Partial -- P Tangle -- TA Partial -- IP
Edit -- E Non-lexical -- NL

Grade XI Boys

	Type of Unit	Number of Words							FUNCTION
		T	P	E	H	TA	NL	IP	
Well, we just walked along the shore.	T	7							II A1
It was bad enough.	T	4							II B
The lake was just covered with shit.	T	7							II A1
There's a lake up in by Peace River	T	9							II A2
It's called Mair Lake.	T	5							II A2
It's got green crud laying on the top	T	9							II A2
Just slime	P		2						
It's really good for water-skiing 'cause it's so slippery.	T	12							II B
Sure	P		1						
It is.	T	2							II B
It's really good for water-skiing or something,	T	9							II B
but you don't fall in.	T	6							II B
Huh	P		1						
I never seen anybody swimming in it.	T	7							II A1
Probably get lost underneath the crud.	P		6						
Yeah	P		1						
Yeah, getting back to the film, eh?	P		7						
It was really different from yesterday's film cause that one guy he was saying how he didn't want everybody -	TA					20			
Uh	NL						1		
That	E			1					
Uh	NL						1		
Uh	NL						1		

ABBREVIATIONS

T-unit -- T Hold -- H Incomplete-Partial -- IP
Partial -- P Tangle -- TA
Edit -- E Non-lexical -- NL

Grade XI Boys

	Type of Unit	Number of Words							FUNCTION
		T	P	E	H	TA	NL	IP	
Let's see.	T	3							IA1
She wanted everybody to be the same.	T	7							IIB
Who said that?	T	3							IB2
Uh	NL						1		
What's that chick's name?	T	5							IB2
Margo.	P		1						
Margo Kedder.	P		2						
Yeah	P		1						
And that millionaire guy	P		4						
Uh.	NL						1		
Uh, huh	NL						2		
He said	IP							2	
George	P		1						
What	P		1						
Yeah, about the millionaire guy	P		5						
Well, it was sorta neat that he was so rich	T	11							IIB
but then he wanted everybody else to be -	TA					8			
Like he wanted it spread around	T	6							IIB
Usually when they get that much money they like to keep most of it for themselves.	T	16							IID
What do you say K.?	T	5							IB2
About the same thing, B.	P		5						
Well, it's running.	T	4							IA2
This is a gyp.	T	4							IIB
Well, maybe we should ask these questions.	T	7							IA1
What were those two gyps at the beginning?	T	8							IB2

ABBREVIATIONS

T-unit -- T
Partial -- P
Edit -- E
Hold -- H
Tangle -- TA
Non-lexical -- NL
Incomplete-Partial -- IP

Grade K1 Boys

	Type of Unit	Number of Words							FUNCTION
		T	P	E	H	TA	NL	IP	
Uh	NL						1		
Those	E			1					
Were they aldermen?	T	3							I B2
They were aldermen, I think.	T	5							II A1
Yeah	P		1						
Oh, yeah	P		2						
That was something though that they	IP							6	
They were pretty weird	T	4							II B
They gave up their money.	T	5							II A1
You know, like	H				3				
They could have better jobs	T	5							II A1
Just to, like	IP							3	
Yeah	P		1						
Yeah	P		1						
Uh	NL						1		
One thing I didn't understand there was that thing about Dallas.	T	12							II E
They had	E			2					
What was with that?	T	4							I B2
Oh, well, it was that they had an old downtown	T	10							II A1
Right	P		1						
And they cleared it all out.	T	6							II A1
And they bull-dozed it.	T	5							II A1
And then they put a section downtown that was strictly just big office buildings	T	14							II A1

ABBREVIATIONS

T-unit -- T | Hold -- H | Incomplete-Partial -- IP
Partial -- P | Tangle -- TA
Edit -- E | Non-lexical -- NL

Grade XI Boys

	Type of Unit	Number of Words T	P	E	H	TA	NL	IP	FUNCTION
No cars?	P		2						
Well, yeah, but on a holiday, nobody there.	P		8						
Cause nobody works	P		3						
And so there's just nobody	T	6							II A1
But	IP							1	
Oh, there's no stores or nothin'.	T	7							II A1
Just business offices	P		3						
Right	P		1						
Ah	NL						1		
Even on Sunday there's no shopping.	T	7							II A1
In stores or holidays.	P		4						
Well, there'd still be people down there	T	8							II B
Yeah	P		1						
But there was nobody on the streets, there	T	8							II A1
Yeah	P		1						
See, in Toronto, though, all the traffic there	IP							8	
I've never been there.	T	5							II E
Yeah.	P		1						
We were there a couple of weeks ago	T	8							II A1
A									
It's just like that Gardiner Expressway she was talking about.	T	11							II B
Oh, yeah.	P		2						
	Total	59	48	6	1	4	13	6	(Units)
	Total	445	28	11	3	34	14	25	(Words)

APPENDIX F

NUMBER OF T-UNITS ASSIGNED TO FUNCTION CATEGORIES

NUMBER OF T-UNITS ASSIGNED TO FUNCTION CATEGORIES

	VIII A*	VIII WT*	XI A*	XI WT*
1. Statements for the Purpose of Operating in the Situation				
A. Statements for Management of the Context				
1. Commands	46	8	10	0
2. Information Statements	36	23	9	1
B. Interactional Statements				
1. Supportive Responses	17	17	23	10
2. Elicitations	25	18	54	19
3. Disagreement Responses	6	5	2	0
4. Insults	3	0	0	0
5. Threats	4	0	0	0
2. Statements for the Purpose of Organizing and Reflecting on Experience				
A. Reporting and Recall Statements				
1. References to the past	37	46	128	29
2. References to the present	45	17	77	16
B. Low-level Generalizations	137	124	142	106
C. Speculations	27	14	30	30
D. Universal Generalizations	32	24	10	19
E. Statements Alluding to Personal Feelings, Experiences or Assessments	14	0	38	4
3. Statements Expressing Inventive Locution				
A. Role-playing Statements	9	0	0	0
B. Word-play Expressions	8	0	0	0
C. Expressions of Fantasy	15	0	1	5
4. Irrelevant Statements	1	2	0	0

*A = Students-alone context; WT = students-with-teacher context.

APPENDIX G

A SAMPLE OF A DESCRIPTION OF A TRANSCRIPT

Grade VIII Girls Alone

Overview

The talk in this group moves quickly from one aspect of the film to another. Two of the girls stick to the task of generating talk about the film, except when they interrupt their discussion to try to get the third girl to "say something." The third girl does not talk. (She may have microphone fright.) The girls mention a number of significant issues, but do little more than mention them before going on to something else.

Topics

1. The hundred-year-old man
2. The actress--Margot
3. Sandy's lack of participation
4. Newscasts

Patterns of Participation

ONE and TWO participate equally in the discussion. They seem dissatisfied with Sandy's refusal to talk. TWO says, "Sandy, you have to say somethin' too." ONE adds, "Yeah, C'mon." However, Sandy is silent. A minute later ONE says, "You better say something, Sandy," TWO adds, "Sandy doesn't want to say anything." Sandy: "Nope." A while later they try again and TWO threatens: "You'll make me mad. You have to say something." After a brief silence TWO seems to excuse Sandy's lack of speech by saying, "Well, actually, there wasn't too much in the

film to talk about." However, TWO and ONE carry on the talk without any help from the third girl.

Personal References

These girls seemed more concerned with the task than with finding personal meaning in the film. The only personal references were to their likes and dislikes or their concern for the third girl's lack of participation. Typical remarks are: "I think . . . that old guy was cool." "I liked that movie." "You better say something, Sandy."

Evidence of Potential for Language Development

In the first part of this unit the first girl responds to TWO's opinion, "I liked the second part better," with a pointed question, "How come?" When TWO only answers "Because," ONE not only states her preference but goes on to give concrete detail to support her point of view. TWO then begins to also give specific references to the film. Both are distracted from their recall of details by the problem of Sandy's refusal to participate.

As they attempt to continue their task ONE appears to be contemplating the word "lifestyles."--"This film Lifestyles. Didn't really show too many lifestyles really." When TWO appears to go on to another aspect of the film, newscasts, ONE applies this new information to the same word: "They (newscasts) affect lifestyles."

After ONE lists some of the things she remembers from the film--"nature, city life, painting, hardware stores," TWO returns to talk about "that old man" and "how it was when that guy invented the telephone." ONE seems to get some insight into history when she says, "Yeah, but when

he lived it was for now, for him, too." ONE indicates she has really thought about his curcumstances when she says, "I think he said--did he say which one he liked better, present or past?"

TWO comments on a characteristic of the actress: "She just wants the money. When she gets the money she just goes."

Summary of Uses of Language

Language used for:

1. listing detail to support an opinion
2. attempted coersion (unsuccessful)
3. categorizing parts of the film (nature, city life, painting, hardware stores)
4. experimenting with word usage (lifestyles).

Grade VIII Girls with Teacher

Overview

In this session the teacher acts as Socratic questioner. However, the teacher does not allow the girls to talk long on one thing before he poses a question on a new topic. The girls' answers are brief and very often so incomplete that the meaning is obscure. At times, the girls try to articulate a sense of how changes and increasing technology really affect people. For example, ONE says, "Otherwise, if you were living when they had no cars, you wouldn't have a car, you know . . . . It'd be pretty hard." TWO applies ONE's ideas to her father--"Like my Dad, could. He's used to, used to it, but, it'd be a harder life to live."

Topics

1. The effects of change
2. The hundred-year-old man
3. The value of the film
4. The girls' futures

Patterns of Participation

The pattern in this unit is: teacher questions, one or two girls answer. The teacher doesn't comment on the answers. Of the 61 utterances, 23 are by the teacher. Every utterance of the teacher is a question or an instruction. The girls answers are usually very brief. ONE and TWO contribute regularly, but THREE makes only six utterances.

Personal References

The girls make few references to themselves. Even when the teacher asks each one: "Explain what's going to happen to you in the next ten

years," they make general answers--"You can't know till it happens" and "For sure, we'll probably have a job."

In answer to the teacher's question about the film, THREE says, "Useless film. I dunno." When the teacher asks "Why was it useless?", THREE says, "I don't know. It was just I didn't get anything out of it, really. Just the beginning was good."

TWO makes one comment which relates the issues in the film to her family. Regarding adjustment to living without cars and telephones she says, "My dad could."

Evidence of Potential for Language Development

Although the teacher asks all the questions in this group, the girls' answers keep referring back to the concept of historical change, particularly as it is affected by technology. ONE begins by saying, "change, even good change affects us." Later ONE refers to the one-hundred-year-old man: "Well, he lived long himself, through the invention of the light bulb. Changes didn't injure him at all. He um was sorta neat." They avoid the teacher's request to discuss their own future by explaining, "Till it comes, you can't say. Change your mind" and "Well, your attitudes towards things change, you know." When the teacher asks, "Do you necessarily have to change your lifestyle?" ONE says, "Yeah, 'cause everything else changes." TWO adds, "Get behind the times--like cars and computers and stuff like that bring changes."

The references to change are not consecutive, but because they come back to this concept frequently, the talk would appear to have value for them as they work out what the film was inferring about the effects of change.

ONE is able to pick out a significant characteristic of the one-hundred-year-old man: "Changes didn't injure him at all." ONE also tries to visualize what it would be like to live through important changes: "If you were living when they had no cars and you lived till when they did have cars. . . it's be pretty hard."

Summary of Uses of Language

Language used for:

1. recalling and restating theories about change
2. relating experiences of film persons to theories of change
3. speculating about change in their own lives
4. visualizing how people are affected by technological changes

Grade XI Boys Alone

Overview

From the beginning H. says more than the other two boys in the group. He tells the others to forget about the tape-recorder. Then he poses the question, "What about this film?" M. discusses the film as "garbage." L. starts to speak, but before he can articulate his thoughts H. begins a fluent reference to one character in the film. After that M. and L.'s contributions are brief responses to H. Then the tape-recorder tipped over. M. suggests they stop it. When H. says, "I don't care. I have no inhibitions about talking, but they're going to think I'm the only person in this group, so you better say something," L. responds with, "You do all the talking anyway, so you might as well keep it up." H. protests, "That's not good," and eventually invites the others to "just talk about what you feel about life." L. responded by launching into a new topic: "What do you think about that guy's three-hundred-point system?"

Topics

1. The lifestyle and attitudes of an actress featured in the film (Margot Kidder).
2. City life compared to country life
3. Old age
4. Careers and lifestyle
5. Group participation

Patterns of Participation

H. recognized the need to involve the other boys, but had so much to say that the others made only brief comments in response to H. When H. finally said, "You better say something," L. suggested H. should continue to do "all the talking" for the group. H. declined, saying "That's not good." H. finally got L. to launch a new topic after H. said ". . . so you just talk about what you feel about life."

Personal References

H. focuses on the lifestyle of the actress, then makes generalizations about problems of lifestyle ". . . if you want to have a house out in the woods somewhere, you have to work in the city first so you can afford it." Eventually H. reveals his own dilemma: "See, I like material objects . . . and you can't have these other things without having some sorta super-paying job . . . in the city."

When H. asks L. "Do you want to be a farmer," L. replies, "No money, man."

M. "I don't want to live in the city. I'd go crazy."

All three boys seemed to have responded to the film Lifestyles by thinking about their own lives.

Evidence of Potential for Language Development

When H. starts talking about "her" and "she" L. seems to identify the person immediately and helps H. find the right word: "That pollution or whatever . . ." That enables H. to carry on, "Yeah, that she, she wanted to be free . . . like, she hated the smog . . . ." H. projects himself into the inconsistencies and dilemmas which were expressed by

actress. When he calls the actress, "a little bit of a hypocrite," he attempts to give a reason, "cause, she said one thing and went off the next whether it was in the same area."

H. is working on his understanding of how life in general operates. "So you trade things. You trade maybe your house for ten years out in the bush or whatever."

H. attempts to take up M's reference to the "hundred-year-old man," but he becomes very involved in reporting what he has read about old people in the Ukraine. He abruptly changes the subject by asking L. a direct question, "Do you want to be a farmer?"

Each of the boys seems to be continuing to think about lifestyle. M. says, "I don't want to live in the city, I'd go crazy." H.'s response is to elaborate on his personal dilemma about city and country life.

H. ends their discussion of each one's responsibility to participate in the discussion by suggesting they could ". . . say strange, weird things that contradict all the rational lows of the world and try to find some application of them . . . but it wouldn't work, so you just talk about what you feel about life."

Summary of Uses of Language

Language used for:

1. formulating a philosophy ("so you trade things")
2. cause and effect
3. analysis of inconsistencies
4. personal analysis ("I have no inhibitions about talking.")
5. negotiating relationships and group responsibilities
6. contemplating the future

Grade XI Boys-with-Teacher

Overview

The teacher's comments on his life form the major portion of the conversation.

The teacher speaks first: "Okay, what is your ambition? What do you want to do, R." L. replies, "I don't know." The teacher tries again: "Well, you must have some sense . . ." H. turns the question back on the teacher, "Well, what is your ambition for the next year, if you don't mind me asking?" This gives the teacher an opportunity to reveal his personal situation, attitudes and ambitions. H. asks encouraging questions and the teacher responds with very long replies. The remainder of this segment of talk focuses on the teacher's views about himself and about life in general.

Topics

1. Financial security compared to the joy of spending
2. Careers
3. Values

Personal References

The teacher's talk about his personal experiences and beliefs comprise over 65 percent of this unit.

H. reveals his attitudes to money and adds a comment on his views about careers ". . . you get swamped by the system; like you get jammed into university, shot out and you're part of the big money-making machine up there in the city."

M. and L. say nothing about themselves.

Evidence of Potential for Language Development

H.'s questions addressed to the teacher show his ability to use language to probe philosophical issues. For example: "So your eventual hope, like all of us, is material objects and nothing more?" Also: "Yes, but you, you're trying to find some sort of in-between material objects and self-satisfaction, right?"

H. uses language to pose a question requiring speculation on the future: "At what stage of your life will you say, 'okay, I have to retire eventually, so I will start to make sacrifices, eh?'"

H. reports on behaviour he has heard about: ". . . cases where somebody dies and has thousands and thousands of dollars in the bank, yet they lived just like paupers." To this he adds his own attitude, "and that's terrible." H. presents his values about money: "I like to have some financial security . . . although I also enjoy things day by day."

H. expresses tentativeness: "Sometimes a person is unsure of what he wants."

H. refers to psychological pressure: "There's some group back there . . . who say 'do this because this is what we think is right.'"

M. poses a question which shows his ability to consider values: "Well, when you were seventeen or eighteen, what was your amibition in life?"

Summary of Uses of Language

Language used for:

1. philosophical considerations
2. speculation on the future
3. reporting on people's values
4. framing personal philosophy
5. information on values